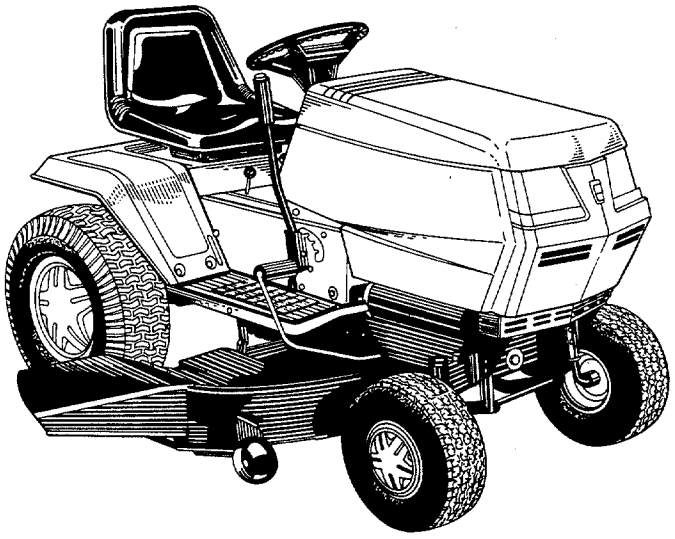
$1.00

OWNER'S GUIDE

Thank you for purchasing an American-built product.

18 H.P.
GARDEN TRACTOR



Model Number
148-814-401

IMPORTANT:
Read Safety Rules and Instructions Carefully

FORM NO. 770-6462C

INDEX

Slope Gauge 3
Contents of Hardware Pack 4
Rules for Safe Operation 5
Assembly 6
Controls 11
Operation 12
Adjustments 13
Lubrication 14
Maintenance 14
Off-Season Storage 17
Trouble Shooting Chart 18, 19
Illustrated Parts for Tractor 20-29
Optional Equipment 25
Illustrated Parts for Transaxle 30, 31
Electrical Diagrams and Parts Lists 32
Parts Ordering Information . . . . . Back Cover

INSTRUCTIONS GIVEN WITH THIS SYMBOL ARE FOR PERSONAL SAFETY. BE SURE TO FOLLOW THEM.

LIMITED WARRANTY

For one year from the date of original retail purchase, MTD PRODUCTS INC will either repair or replace, at its option, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser unless such return is requested by MTD PRODUCTS INC.

This warranty will not apply to any part which has become inoperative due to misuse, excessive use, accident, neglect, improper maintenance, alterations, or unless the unit has been operated and maintained in accordance with the instructions furnished. This warranty does not apply to the engine, motor, battery, battery charger or component parts thereof. Please refer to the applicable manufacturer's warranty on these items.

This warranty will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, please write to the Customer Service Department of MTD.

The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by MTD.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

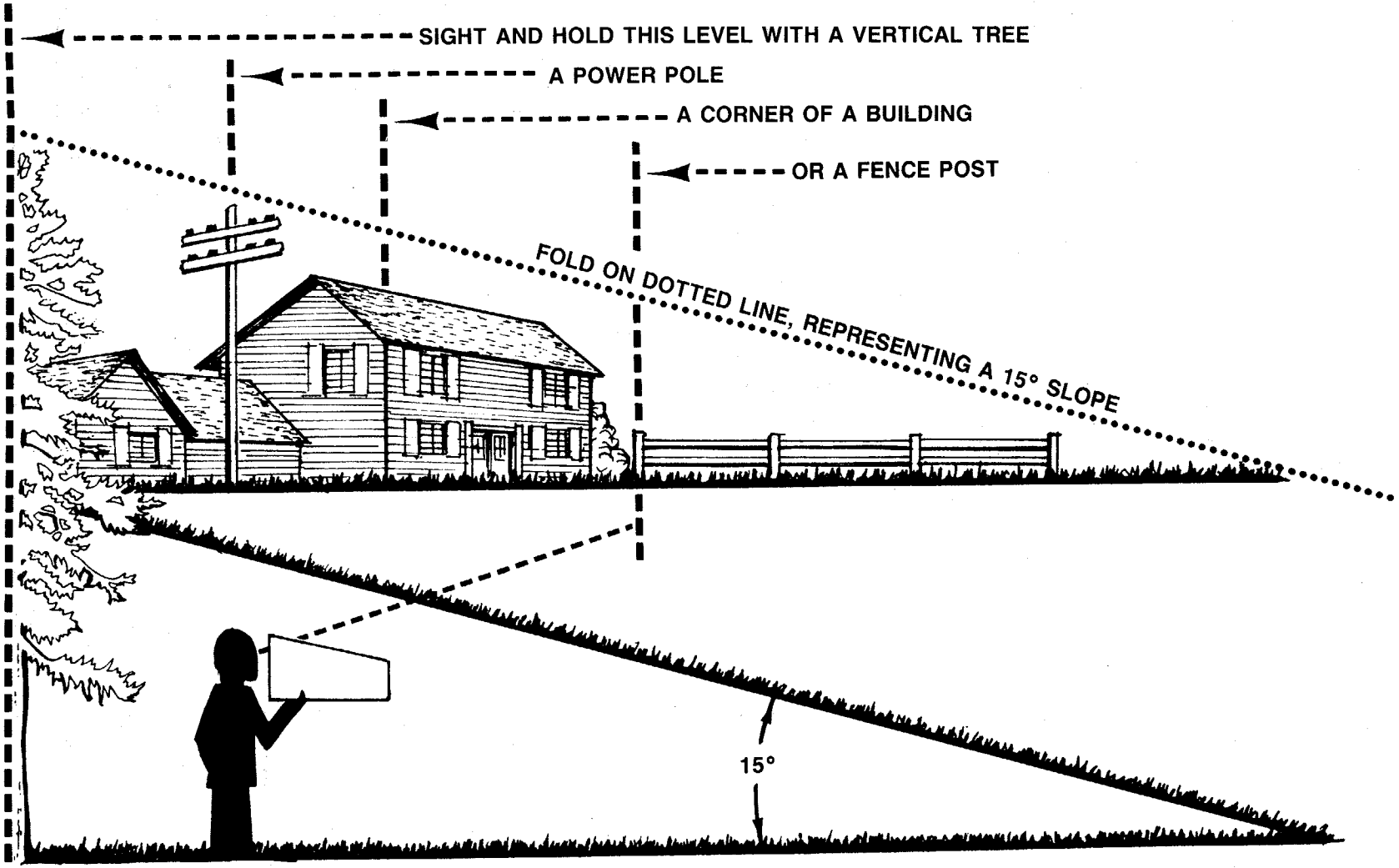
WARNING: This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester for the muffler is available through your nearest engine authorized service center.

SLOPE GAUGE

(Keep this sheet in a safe place for future reference.)

USE THIS SHEET AS A GUIDE TO DETERMINE SLOPES WHERE YOU MAY NOT OPERATE SAFELY.


SIGHT AND HOLD THIS LEVEL WITH A VERTICAL TREE
A POWER POLE
A CORNER OF A BUILDING
OR A FENCE POST
FOLD ON DOTTED LINE, REPRESENTING A 15° SLOPE
15°

WARNING

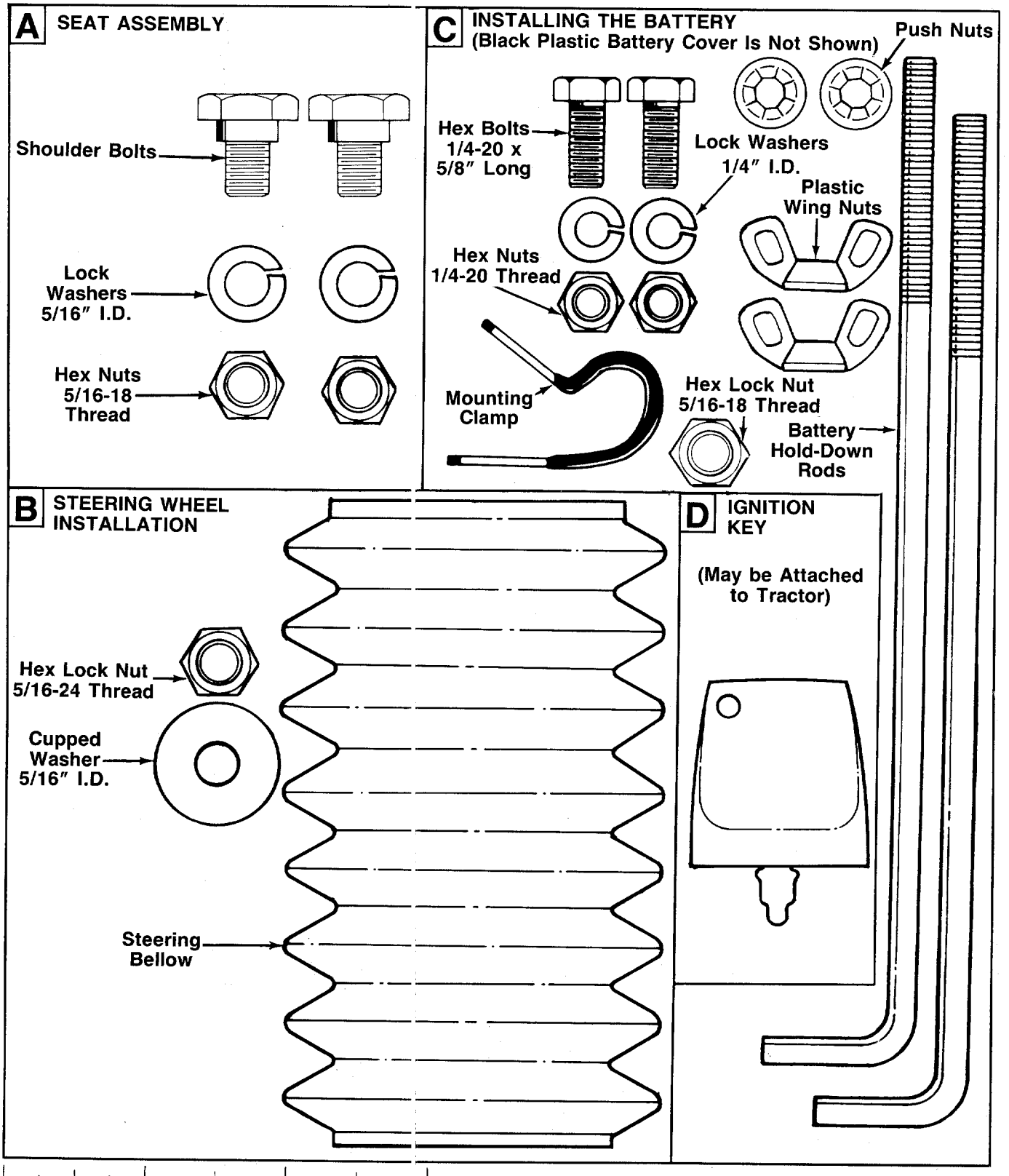
Do not mow on inclines with a slope in excess of 15 degrees (a rise of approximately 2½ feet every 10 feet). A riding mower could overturn and cause serious injury. If operating a walk-behind mower on such a slope, it is extremely difficult to maintain your footing and you could slip, resulting in serious injury.

Operate RIDING mowers up and down slopes, never across the face of slopes.
Operate WALK-BEHIND mowers across the face of slopes, never up and down slopes.

CONTENTS OF HARDWARE PACK

Remove this sheet from your owner's manual and lay the hardware on the illustration for identification purposes. Refer to the separate deck manual for any information concerning the deck. After assembly, keep the Slope Gauge which is on the reverse side of this sheet for future use.

(Hardware pack may contain extra items which are not used on your unit.)


A SEAT ASSEMBLY
Shoulder Bolts
Lock Washers 5/16" I.D.
Hex Nuts 5/16-18 Thread
C INSTALLING THE BATTERY (Black Plastic Battery Cover Is Not Shown)
Push Nuts
Hex Bolts 1/4-20 x 5/8" Long
Lock Washers 1/4" I.D.
Plastic Wing Nuts
Hex Nuts 1/4-20 Thread
Mounting Clamp
Hex Lock Nut 5/16-18 Thread
Battery Hold-Down Rods
B STEERING WHEEL INSTALLATION
Hex Lock Nut 5/16-24 Thread
Cupped Washer 5/16" I.D.
Steering Bellow
D IGNITION KEY
(May be Attached to Tractor)

0 1 2 3
INCHES

IMPORTANT

RULES FOR SAFE OPERATION

THIS SYMBOL POINTS OUT IMPORTANT SAFETY INSTRUCTIONS WHICH, IF NOT FOLLOWED, COULD ENDANGER THE PERSONAL SAFETY AND/OR PROPERTY OF YOURSELF AND OTHERS. READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL BEFORE ATTEMPTING TO OPERATE YOUR UNIT. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY. WHEN YOU SEE THIS SYMBOL— ⚠ **HEED ITS WARNING.**

DANGER

Your unit was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. If you violate any of these rules, you may cause serious injury to yourself or others.

1. READ THIS OWNER'S MANUAL carefully in its entirety before attempting to assemble or operate this unit. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
2. This unit is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.
3. Know the controls and how to stop the machine quickly.
4. Do not allow children to operate vehicle. Do not allow adults to operate it without proper instruction. Only persons well acquainted with these rules of safe operation should be allowed to use your mower.
5. Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts to avoid entanglement in the moving parts. Never operate a unit in bare feet, sandals, or sneakers.
6. To prevent injury, do not carry passengers or give rides. Keep children, pets and bystanders out of the area while mowing. Only the operator should ride on the unit and only ride in the seat.
7. Check overhead clearance carefully before driving under power lines, guy wires, bridges or low hanging tree branches, before entering or leaving buildings, or in any other situation where the operator may be struck or pulled from the unit, which could result in serious injury.
8. To maintain control of the unit and reduce the possibility of upset or collision, operate the tractor smoothly. Avoid erratic operation and excessive speed.
9. Keep the area of operation clear of all persons, particularly small children and pets. Stop engine when they are in the vicinity of your mower. Although the area of operation should be completely cleared of foreign objects, a small object may have been overlooked and could be accidently thrown by the mower in any direction and cause injury to you or a bystander.
10. Stop the blade(s) when crossing gravel drives, walks or roads.
11. Disengage all attachment clutches and shift into neutral before attempting to start engine.
12. Disengage power to attachment(s) and stop engine before leaving operating position.
13. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times as the rotating blade(s) can cause injury.
14. Disengage power to attachment(s) and stop engine before making any repairs or adjustments. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
15. Before attempting to unclog the mower or discharge chute, stop the engine. The mower blade(s) may continue to rotate for a few seconds after the engine is shut off. Therefore, be sure the blade(s) have stopped completely. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
16. Disengage power to attachment(s) when transporting or not in use.
17. Take all possible precautions when leaving vehicle unattended such as disengaging power take-off, lowering attachments, shifting into neutral, setting parking brake, stopping engine and removing key.
18. For your safety, use the slope gauge included as part of this manual to measure slopes before operating this unit on a sloped or hilly area. If the slope is greater than 15° as shown on the slope gauge, do not operate this unit on that area or serious injury could result.
19. Do not stop or start suddenly when going uphill or downhill. Mow up and down face of steep slopes; never across the face. Use extreme caution if it is necessary to drive the tractor up an incline or back the tractor down an incline because the front of the tractor could lift and rapidly flip over backward which could cause serious injury.
20. Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Always keep the tractor in gear when going down steep hills to take advantage of engine braking action.
21. Stay alert for holes in terrain and other hidden hazards which may cause the unit to tip over.
22. Use care when pulling loads or using heavy equipment.
    A. Use only approved drawbar hitch points.
    B. Limit loads to those you can safely control.
    C. Do not turn sharply. Use care when backing.
    D. Use counterweight(s) or wheel weights when suggested in owner's manual.
23. Watch out for traffic when crossing or near roadways.
24. When using any attachments, never direct discharge of material toward bystanders nor allow anyone near vehicle while in operation.
25. Handle gasoline with care. It is highly flammable.
    A. Use approved gasoline container.
    B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors. Wipe up spilled gasoline.
    C. Open doors if engine is run in garage. Exhaust fumes are dangerous. Do not run engine indoors.

Rules for Safe Operation (continued)

26. Keep the vehicle and attachments in good operating condition, and keep safety devices in place. Use guards as instructed in operator's manual.
27. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
28. Never store the machine with fuel in the fuel tank inside a building where ignition sources are present, such as hot water and space heaters, clothes dryers, and the like. Allow the engine to cool before storing in any enclosure.
29. To reduce fire hazard, keep engine free of grass, leaves or excessive grease.
30. The vehicle and attachments should be stopped and inspected for damage after striking a foreign object. The damage should be repaired before restarting and operating the equipment.
31. Do not change the engine governor settings or overspeed the engine.
32. When using the vehicle with mower, proceed as follows:
    (1) Mow only in daylight or in good artificial light.
    (2) Never make a cutting height adjustment while engine is running if operator must dismount to do so.
    (3) Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher.
    (4) Check blade mounting bolts for proper tightness at frequent intervals.
33. Check grass catcher bags frequently for wear or deterioration. For safety protection, replace only with new bag meeting original equipment specifications.
34. Look behind to make sure the area is clear before placing the transmission in reverse and continue looking behind while backing up. Disengage blades before shifting into reverse and backing up.
35. This unit should not be driven up a ramp onto a trailer or truck under power, because the unit could tip over, causing serious personal injury. The unit must be pushed manually to load properly.

IMPORTANT: This unit is shipped WITHOUT GASOLINE or OIL; however, a small amount of oil may be present from the factory. Do not overfill. After assembly, service engine with gasoline and oil as instructed in the separate engine manual packed with your unit.

NOTE: Reference to right or left hand side of the unit is observed from the driver's seat, facing forward. Refer to the separate deck manual for all information concerning the deck.

ASSEMBLY

UNPACKING

1. Remove the carton from the tractor as follows. Cut and remove the bands around the carton. Open the top flaps and remove all carton inserts. Lift the carton off the tractor. Roll the tractor off the skid. Make certain all parts and literature have been removed from the carton before the carton is discarded.
2. Remove page four from this manual and lay the contents of the hardware pack on the illustration for identification.

BATTERY INFORMATION

WARNING

A. Battery acid must be handled with great care as contact with it can burn and blister the skin. It is also advisable to wear protective clothing (goggles, rubber gloves and apron) when working with it.*

B. Should battery acid accidentally splatter into the eyes or onto the face, rinse the affected area immediately with clean, cold water. If there is any further discomfort, seek prompt medical attention.

C. If acid spills on clothing, first dilute it with clean water, then neutralize with a solution of ammonia/water or baking soda/water.

D. Since battery acid is corrosive, do not pour it into any sink or drain. Before discarding empty electrolyte containers, rinse them with a neutralizing solution.

E. NEVER connect or disconnect charger clips to battery while charger is turned on as it can cause sparks.

F. Keep all lighted materials (cigarettes, matches, lighters) away from the battery as the hydrogen gas generated during charging can be combustible.

G. As a further precaution, only charge the battery in a well-ventilated area.

***Always shield eyes, protect skin and clothing when working near batteries.**

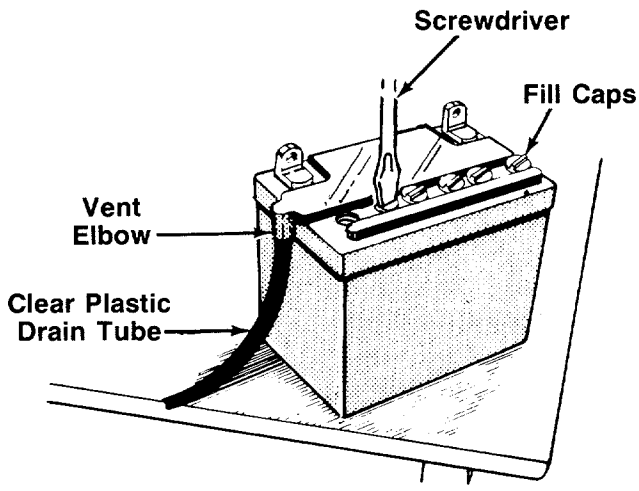


FIGURE 1.

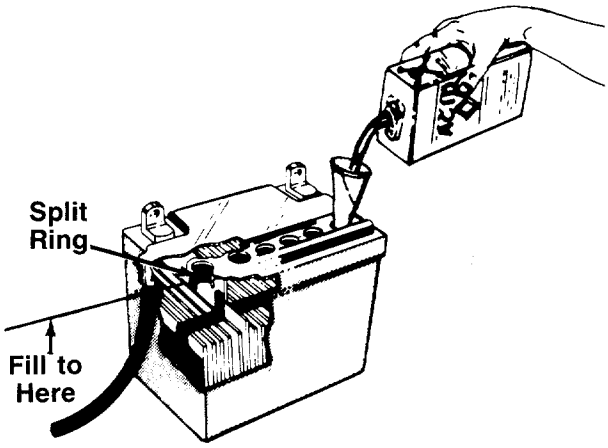


FIGURE 2.

DANGER

Battery contains sulfuric acid. Refer to warning on page 6. Antidote: EXTERNAL—Flush with water. INTERNAL—Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or vegetable oil. Seek prompt medical attention. EYES: Flush with cool water for at least 15 minutes, then seek immediate medical attention.

Since batteries produce explosive gases, keep all lighted materials (cigarettes, lighters, matches, etc.) away. Be sure to charge battery only in well-ventilated areas.

KEEP BATTERIES
OUT OF THE REACH OF CHILDREN!

ACTIVATING THE BATTERY

Do not activate battery (fill with battery acid) until battery is actually placed in service. Be certain to read previous warnings before activating the battery.

1. Open the battery pack. Be careful not to puncture the box. It contains the battery with a long plastic tube attached, battery fluid (acid) in a cardboard container and one cone.
2. Place the battery on a table or workbench. Make certain the long plastic drain tube is in place on the vent elbow.
3. Remove the six fill caps from the top of the battery with a screwdriver. Be careful not to damage the fill caps. See figure 1.
4. Cut off the tip of the cone for use as a funnel.
5. Place the battery fluid container upright on the table or workbench. Carefully remove the flap on the box, and pull out the plastic tube. Cut off the tip of the plastic tube. Do not squeeze the container when cutting the tip.
6. Fill each battery cell slowly and carefully to the split ring at the bottom of the well. See figure 2. Use caution as the acid level will rise rapidly after the bottom of the cell is filled. DO NOT OVERFILL.
7. Allow battery to stand for 30 minutes with the fill caps removed, while the plates absorb acid.
8. If acid level has fallen after the 30 minute standing period, refill each cell with battery acid to the split ring. Replace the fill caps.
9. Before discarding the empty container, neutralize any residue with baking soda and rinse container with water. Puncture container several times before discarding.
10. Charge the battery after the 30 minute standing period. SLOW CHARGE THE BATTERY (DO NOT FAST CHARGE) at a maximum bench rate of 5 amperes until the specific gravity reading is 1.265 (approximately 30 minutes).

NOTE

After battery has been in service, add only distilled water to replace normal loss. Do not add acid.

NOTE

This engine is equipped with an alternator. The current for the battery charger alternator is unregulated. During normal operation, it is only necessary to charge the battery:

1. When it is activated for the first time.
2. Before winter storage.
3. Before using the tractor after winter storage.

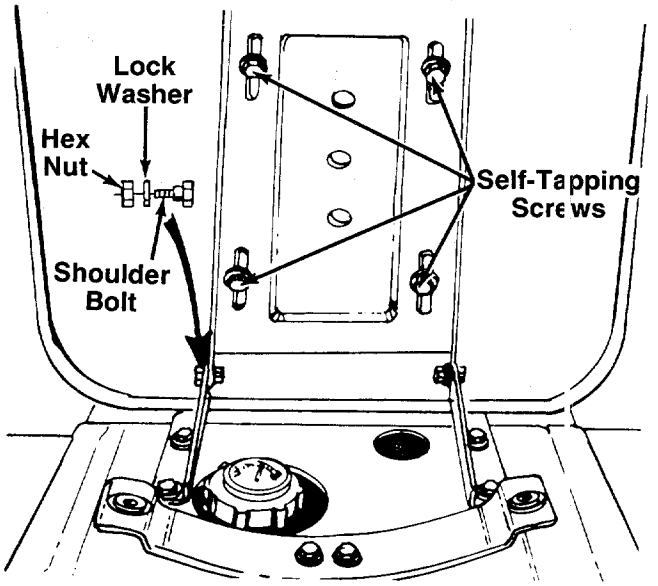


FIGURE 3.

SEAT ASSEMBLY (Hardware A)

1. Place the seat in position against the seat brackets. Secure each side of seat with shoulder bolts, lock washer and hex nut. Crown side of washers should be against the head of the bolt and the nut. See figure 3.

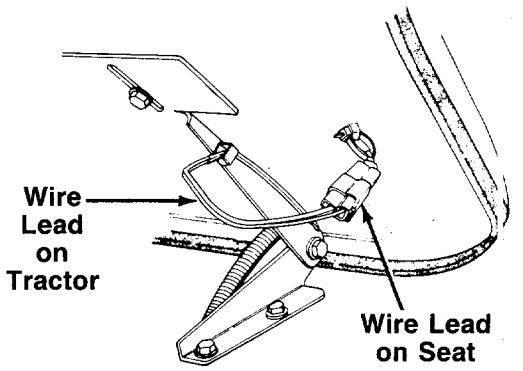


FIGURE 4.

2. Plug the wire lead which is in the wire harness beneath the seat into the plug on the wire lead extending from the right hand side of the seat. Make certain to route the wire in front of the right hand seat bracket so the wire is not pinched when raising and lowering the seat. See figure 4.

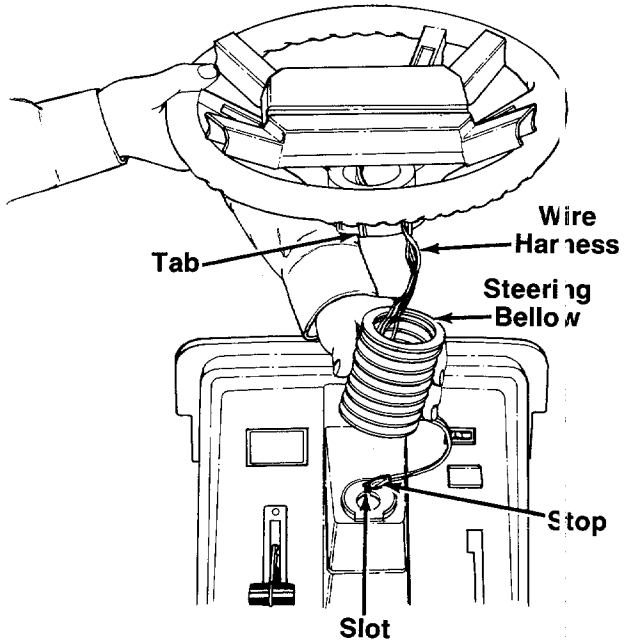


FIGURE 5.

STEERING WHEEL INSTALLATION (Hardware B)

Your unit is equipped with indicator lights, located in the steering wheel. The steering wheel must be assembled as follows for proper operation of the indicator lights.

1. Open the hood of the tractor.
2. Place the larger end of the steering bellow over the wire harness extending through the steering wheel (bellow must fit over the four tabs on the steering wheel). See figure 5.
3. Insert the ends of the wire harness down through the hole in the dash. Then slide the wires through the slot into the smaller hole in the dash to the stop (tape) on the harness as shown in figure 5. Only about 6″ of wire will extend beneath the dash.
4. Plug the three connectors on the wire harness into the corresponding connectors on the tractor.

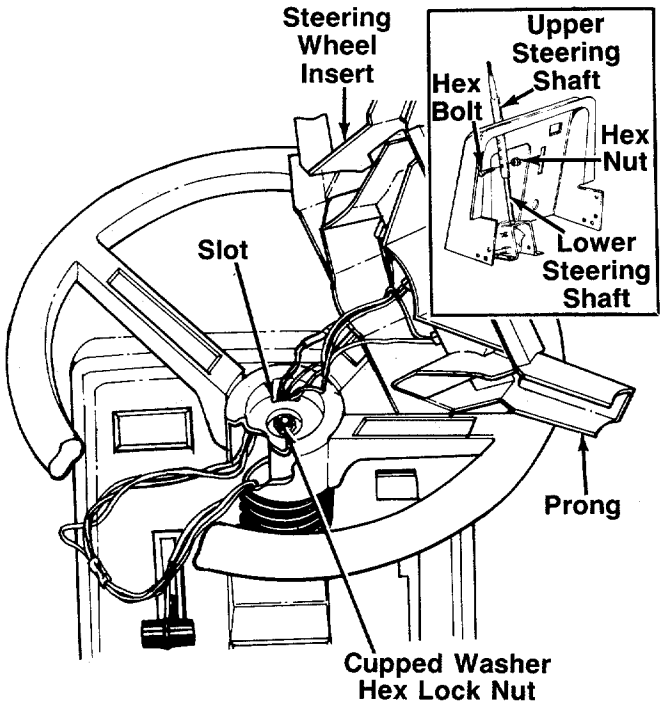


FIGURE 6.

5. Slide the upper steering column through the hole in the dash, over the lower steering column. Insert hex bolt through upper and lower column to secure temporarily in any one of the four hole locations.
6. Position the front wheels of the tractor so they are pointing straight forward.
7. Slide the steering bellow over the steering column. Hold the wires out of the way as shown. See figure 6.
8. Place the steering wheel over the steering column, positioning steering wheel as shown (slot for the wires is toward the front of the tractor).
9. Place the washer with the cupped side down over the steering column. Secure with 5/16" hex lock nut.
10. Attach the steering wheel insert to the steering wheel as follows.
    a. Position the steering wheel insert so the lights are toward the bottom.
    b. Place the two prongs on one side of the insert over two of the spokes on the steering wheel. Press into place.
    c. Take the slack out of the wires by pulling through the steering wheel.
    d. Press the prongs on the other side of the insert over the other two spokes on the steering wheel.
11. Remove the hex bolt which is holding the upper and lower steering columns. Turn steering wheel three full revolutions clockwise.
12. The four holes in the upper steering column provide four height positions for the steering wheel. See figure 6, inset. Select desired position, and secure with hex bolt and hex lock nut. Tighten securely.
13. If any excess wire is beneath the steering wheel, insert it inside the steering bellow. Pull bellow up against the bottom of the steering wheel.

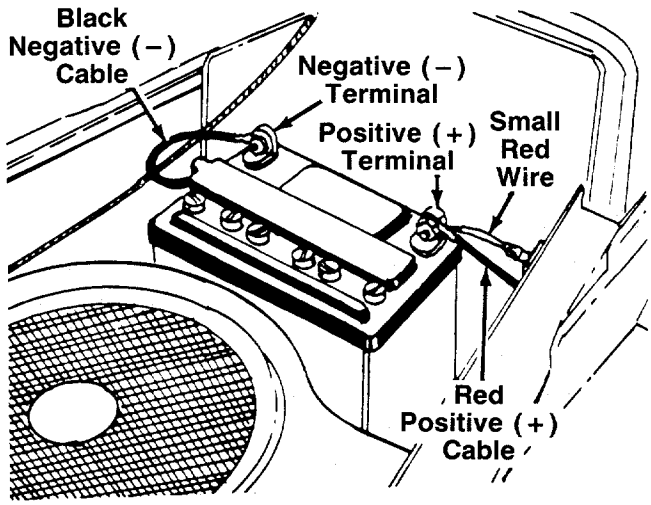


FIGURE 7.

INSTALLING THE BATTERY (Hardware C)

NOTE

The positive battery terminal is marked Pos. (+). The negative battery terminal is marked Neg. (−).

1. Place the battery on the battery plate with the terminals towards the rear of the tractor.
2. Attach the positive cable (heavy red wire) and the small red wire (from the circuit breaker) to the positive battery terminal (+) with hex bolt 5/8" long, 1/4" lock washer and hex nut. See figure 7.
3. Attach the negative cable (heavy black wire) to the negative battery terminal (−) with the other hex bolt 5/8" long, 1/4" lock washer and hex nut.

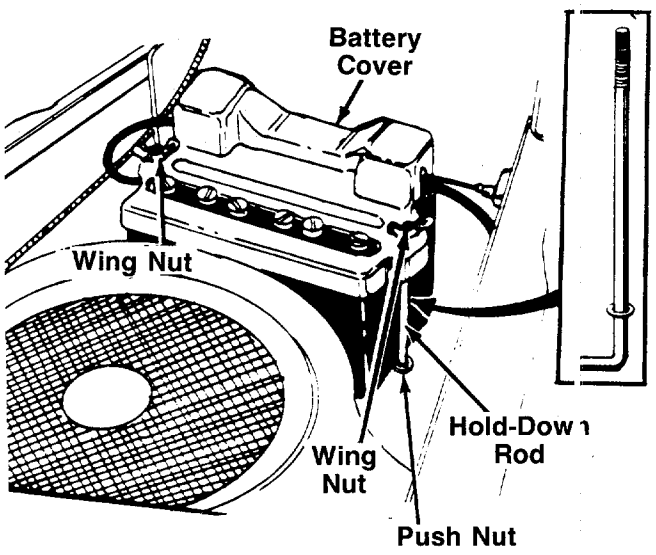


FIGURE 8.

4. Attach one push nut to each of the battery hold-down rods as shown in figure 8, inset.
5. Hook one hold-down rod into the hole in battery plate beside the battery. Slide the push nut to the bottom of the hold-down rod. See figure 8. Place the black plastic battery cover in position over the hold-down rod. Secure with wing nut. Attach other hold-down rod to the other side of battery cover in the same manner.

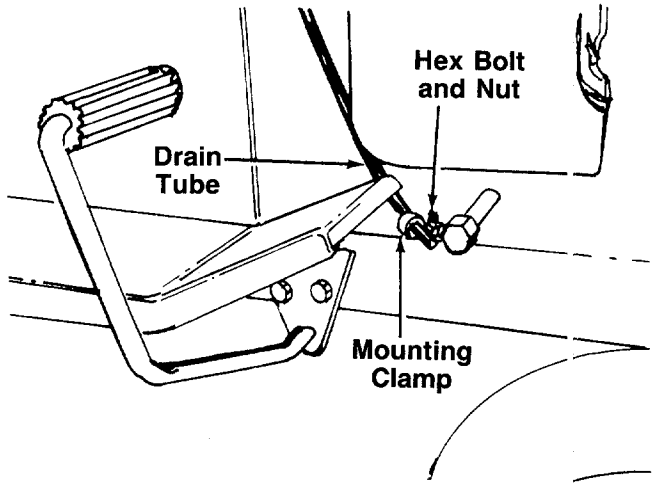


FIGURE 9.

6. Route the battery drain tube down beside the oil drain pipe on the **right** side of the tractor. Slip the end of the drain tube into the mounting clamp provided in hardware pack. Secure the mounting clamp to the tractor by placing the clamp over the hex bolt and nut which hold the engine pulley belt guard to the frame. Secure in place with hex lock nut. See figure 9.

NOTE

The vented battery allows any gases or liquid from the battery to be drained onto the ground.

TIRE PRESSURE

For shipping purposes, the tires on your unit may be over-inflated. Tire pressure should be reduced before unit is put into operation. Recommended operating tire pressure should be 10 p.s.i.

Check sidewall of tire for manufacturer's maximum tire pressure. If this information does not appear on your tire, maximum tire pressure under any circumstances is 30 p.s.i. Equal tire pressure should be maintained on all tires.

CONTROLS

IGNITION SWITCH

The ignition switch is located on the dashboard. Turn the key to the START position to start the engine. When the engine is running, leave the key in the ON position. To stop the engine, turn the key to the OFF position. See figure 10.

WARNING

Remove the key from the tractor when the tractor is not in use to prevent accidental starting.

THROTTLE CONTROL

The throttle control is located on the left side of the dashboard and is used to regulate the engine speed. See figure 10. The engine should be operated from ¾ to full throttle (FAST) when operating any equipment that uses the tractor engine as a source of power such as the mowing deck, snow thrower or rotary tiller.

CHOKE CONTROL

The choke control is located on the right side of the dashboard and is operated manually. Details for the choke operation are covered in the separate engine manual packed with your unit. See figure 10.

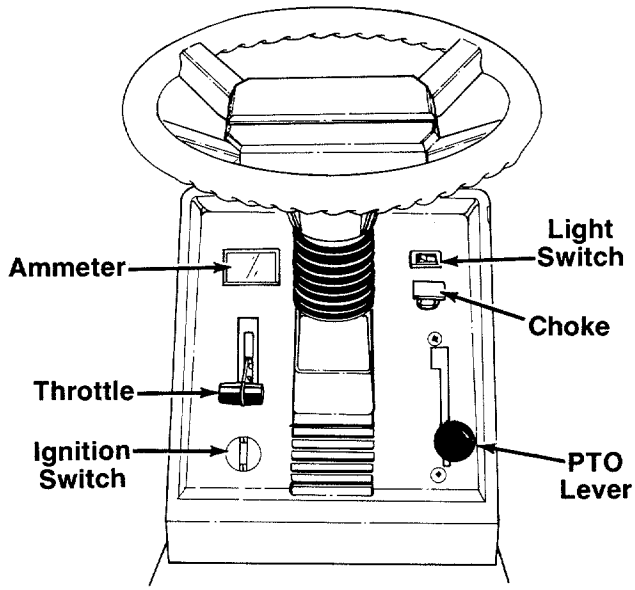


FIGURE 10.

LIGHT SWITCH

The head lamps are operated by pushing the light switch located on the dashboard. The head lamps will only operate when the engine is running. See figure 10.

AMMETER

The ammeter registers the rate of battery charge or discharge. The ammeter will register on the discharging side with starting the engine. It should register on the opposite side (charging) when the engine is running in the fast position until the battery is completely charged. With a fully charged battery or with the engine idling, the ammeter will not show a charge. See figure 10.

GASOLINE TANK

The gasoline tank is located under the tractor seat. Tip the seat forward to fill the tank. Refer to figure 3. Be careful not to pinch the wire lead to the seat switch when raising and lowering the seat.

GEAR SHIFT LEVER

The transaxle has four forward gears, neutral and reverse. Do **not** shift through the gears on the transaxle as you would in an automobile. Pre-select the gear appropriate for the job you are doing. See figure 11.

You must depress the clutch-brake pedal and come to a complete stop before shifting gears.

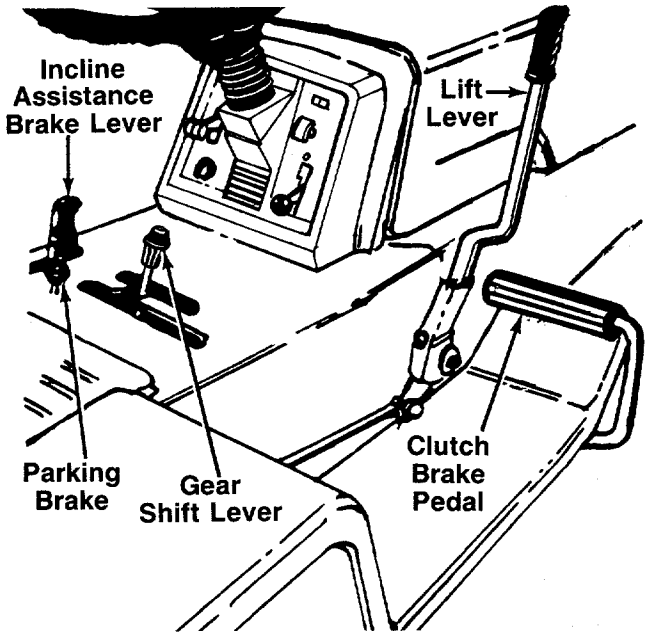


FIGURE 11.

CLUTCH-BRAKE PEDAL

The clutch-brake pedal is located on the right side of the tractor. See figure 11. Depressing the clutch-brake pedal part way disengages the clutch. Pressing the pedal all the way down disengages the clutch and engages the disc brake.

NOTE

The clutch-brake pedal must be depressed to start the engine.

PARKING BRAKE

To set the parking brake, depress the clutch-brake pedal and pull up the parking brake knob. It will stay in the raised position. To release the parking brake, depress and release the clutch-brake pedal. See figure 11.

INCLINE ASSISTANCE BRAKE LEVER

When stopping on a hill, hold the incline assistance brake lever back while you release the clutch-brake pedal until the tractor begins to move, then release the lever. This lever permits smoother starts and clutch engagement by holding the tractor during the brake release/clutch engagement operation. See figure 11.

LIFT LEVER

The five position lift lever is used to change the operating position of the attachments. To operate, pull the lever towards you. To release, move the lever to the right and then forward. See figure 11.

POWER TAKE-OFF (PTO) LEVER

The PTO lever is located on the right side of the dashboard. To engage the PTO, lift the lever slowly and lock it into the notch. See figure 10.

NOTE

The PTO lever **must** be in the disengaged position (down) when starting the engine when shifting into reverse and if the operator leaves the seat.

INDICATOR LIGHTS

The unit is equipped with three indicator lights, located in the steering wheel. If a light illuminates when attempting to start the unit, proceed as follows:

CLUTCH—Depress the clutch pedal.
PTO—Disengage the PTO lever.
REVERSE—Designates unit is in reverse. **Use Caution.**

OPERATION

CAUTION

- READ OPERATOR'S MANUAL(S) • NEVER CARRY CHILDREN
- KNOW LOCATION AND FUNCTION OF ALL CONTROLS
- KEEP SAFETY DEVICES (GUARDS, SHIELDS AND SWITCHES) IN PLACE AND WORKING
- REMOVE OBJECTS THAT COULD BE THROWN BY BLADE(S)
- DO NOT OPERATE THE UNIT WHEN CHILDREN AND OTHERS ARE AROUND
- ALWAYS LOOK BEHIND THE UNIT BEFORE BACKING UP
- DO NOT OPERATE THE UNIT WHERE IT COULD SLIP OR TIP
- IF THE UNIT STOPS GOING UPHILL, STOP BLADE(S) AND BACK SLOWLY DOWNHILL
- BE SURE BLADE(S) AND ENGINE ARE STOPPED BEFORE PLACING HANDS OR FEET NEAR BLADE(S)
- BEFORE LEAVING OPERATOR'S POSITION, SHUT ENGINE OFF AND REMOVE KEY

GAS AND OIL FILL-UP

Service the engine with gasoline and oil as instructed in the separate engine manual packed with your tractor. Read instructions carefully.

NOTE

Your tractor is shipped without oil; however, a small amount of oil may be present from the factory. Do not overfill.

WARNING

Never fill fuel tank indoors, with engine running or while engine is hot.

OPERATING THE TRACTOR

NOTE

This unit is equipped with a **safety interlock system** for your protection. The purpose of the safety interlock system is to prevent the engine from cranking or starting unless the clutch-brake pedal is depressed and the PTO lever is in the disengaged position. In addition, the PTO lever must be in the disengaged position when the unit is put into reverse or the engine will shut off. If the operator leaves the seat with the PTO lever engaged, the engine will shut off.

WARNING

Do not operate the tractor if the interlock system is malfunctioning because it is a safety device, designed for protection.

1. Place the PTO lever in the disengaged (down) position.
2. Pull out the choke control. A warm engine requires less choking.
3. Set the throttle control in the FAST position.
4. Depress the clutch-brake pedal and hold it down.
5. Turn the ignition key to the START position. After the engine starts, release the key.
6. Slowly push in the choke as the engine warms up.
7. With the clutch-brake pedal depressed, move the gear shift lever into one of the forward gears or reverse.
8. Slowly release the clutch-brake pedal and the tractor will move forward.

9. When stopping, depress the clutch-brake pedal. This will apply both the clutch and the brake.
10. To shut off the engine, turn the ignition key to the left to the OFF position. Remove the key to prevent accidental starting while equipment is unattended.

IMPORTANT

If you strike a foreign object, stop the engine. Remove wire from spark plug, thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower.

NOTE

If any problems are encountered, refer to the Trouble Shooting Chart on page 18.

3. On a level surface, engage the PTO and lower the deck until it reaches the ground.

   All four deck wheels should reach the ground at the same time. If they do not, adjust the deck links as necessary.

NOTE

When adjusting the deck links, disengage the PTO. Remove the hairpin clip and washer from the weld bolt. Thread eyebolt up or down the link as necessary, and reassemble.

4. Raise the deck ½″ to 1″ above the aground.

   Check to be certain the distance from the bottom edge of the deck to the ground is the same on both sides of the deck. If it is not, adjust the links on the left side of the unit.

   Check to be certain the front of the deck is 1/4″ to 3/8″ lower than the rear of the deck. If it is not, adjust the two front links to obtain this distance.

ADJUSTMENTS

WARNING

Disconnect the spark plug wire and ground against the engine before performing any adjustments, repairs or maintenance.

SEAT ADJUSTMENT

To adjust the position of the seat, loosen the four self-tapping screws on the bottom of the seat. See figure 3. Slide the seat forward or backward as desired. Retighten the self-tapping screws.

REAR WHEEL TRACK ADJUSTMENT

The distance between the rear wheels can be changed from wide to narrow by removing the rear wheels one at a time and reversing them on the hub.

With the rear wheels in the narrow position, the outside of the rear wheels is even with the inside of the front wheels.

With the rear wheels in the wide position, the inside of the rear wheels is even with the inside of the front wheels.

LEVELING THE DECK

1. Check tire pressure in all four tires. Recommended pressure is 10 p.s.i.
2. Make certain all deck wheels are mounted in same relative location.

STEERING WHEEL ADJUSTMENT

There are four height positions for the steering wheel. To adjust the height of the steering wheel, remove the hex bolt and hex lock nut on the steering shaft. Place the steering wheel in the position desired and secure with hex bolt and hex lock nut. Refer to figure 6, inset.

NOTE

When raising the height of the steering wheel, stretch the steering bellow to cover the steering shaft.

BRAKE ADJUSTMENT

During normal operation of this machine, the brakes are subject to wear and will require periodic examination and adjustment.

WARNING

Do not adjust the brake while the engine is running. Be sure to block the wheels of the tractor before making the brake adjustment.

1. Loosen the lock nut. See figure 12.
2. Tighten the center bolt all the way in.
3. Unscrew the center bolt one complete turn.
4. Test the brakes and repeat step three if necessary.
5. Tighten the lock nut.

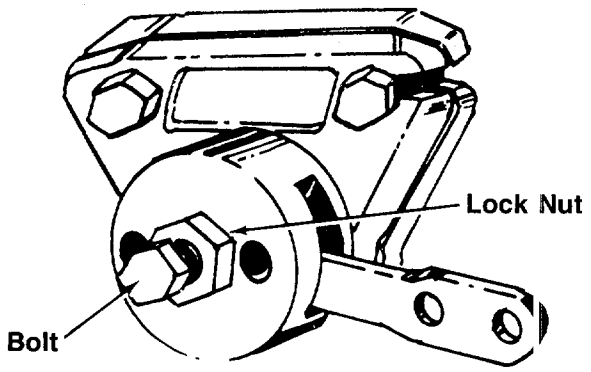


FIGURE 12.

CARBURETOR ADJUSTMENTS

WARNING

If any adjustments are made to the engine while the engine is running (e.g. carburetor), disengage all clutches and blades. Keep clear of all moving parts. Be careful of heated surfaces and muffler.

Minor carburetor adjustments may be required to compensate for differences in fuel, temperature, altitude and load. Refer to separate engine manual for carburetor adjustment information.

NOTE

A dirty air cleaner will cause an engine to run rough. Be certain air cleaner is clean and attached to the carburetor before adjusting carburetor. Refer to the separate engine manual.

LUBRICATION

STEERING GEARS

Wipe off the old grease and dirt. After every 25 hours of operation place an automotive multi-purpose grease in the teeth of the segment and pinion gears. See figure 13.

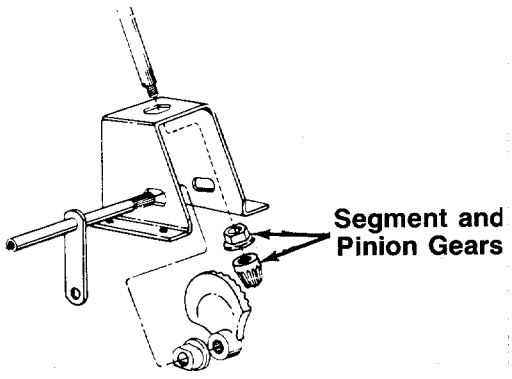


FIGURE 13.

TRANSAXLE

Check the oil level four times a year. Lubricant should be at the point of overflowing. Use E.P. 90 oil. Drain and refill every two years. Capacity 4 pints. See figure 14.

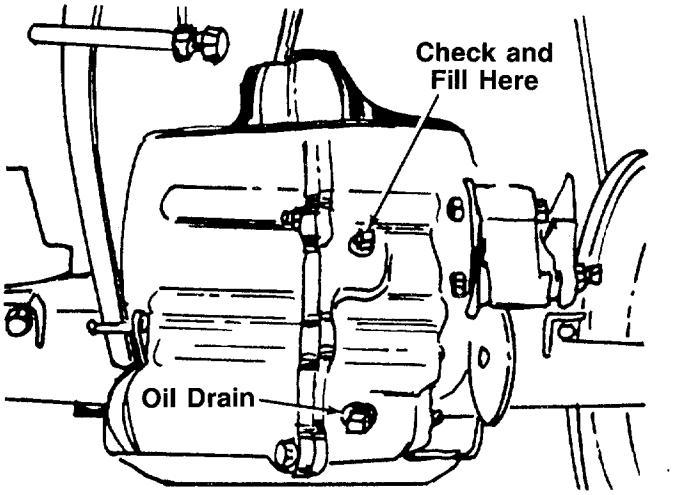


FIGURE 14.

LINKAGE

Once a season lubricate all the pivot points on the clutch, brake and lift linkage with SAE 30 engine oil.

FRONT WHEELS

The front wheels are provided with grease fittings. Lubricate at least once a season with automotive multi-purpose grease.

PIVOT POINTS

Lubricate all pivot points with light oil at least once a season.

BALL JOINTS

The ball joints and drag link ends are permanently lubricated.

MAINTENANCE

WARNING

Disconnect the spark plug wire and ground against the engine before performing any adjustments, repairs or maintenance.

TROUBLE SHOOTING

Refer to the chart on page 18 for trouble shooting engine problems.

CRANKCASE OIL

To ensure maximum engine performance, perform the following periodic maintenance:

Check the oil level in the crankcase before each use of the machine and after every two hours of operation. Keep the oil level between ADD and FULL. See figure 15.

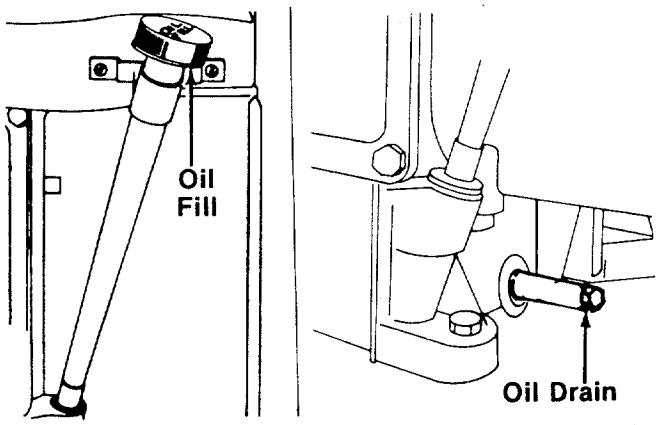


FIGURE 15.

After the first five hours of operating a new engine, drain the oil (see figure 15) from the crankcase while engine is still hot and refill crankcase with new oil; thereafter change the oil after every 25 hours of operation. This procedure ensures minimum wear of engine parts. To change the oil, proceed as follows:

Step 1. Remove oil filler plug.
Step 2. Drain the oil.
Step 3. Replace oil filler plug.
Step 4. Refill crankcase with oil. Refer to separate engine manual for quantity and type of oil.

FUEL FILTER

Your unit is equipped with a replaceable in-line fuel filter. Replace filter whenever contamination or discoloration is noticed. Order replacement filter through your authorized engine service dealer.

WHEEL ALIGNMENT

The front wheels should toe-in approximately 1/8".

Measure the distances A and B on the front wheels. See figure 16.

NOTE

Dimension B should be approximately 1/8 inch less than dimension A.

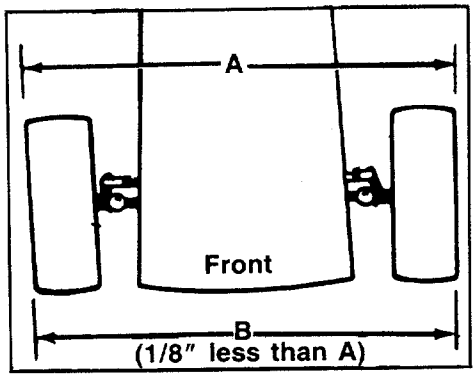


FIGURE 16.

To adjust the toe-in, loosen the hex jam nut, remove the elastic lock nut, lift the tie rod end out of the hole in the steering arm and screw the tie rod end in or out as necessary. See figure 17.

Reassemble the tie rod end after the correct alignment is made.

DRAG LINK

If the drag link or ball joints are changed, the new assembly must be adjusted to the exact same length as the original. If adjusted incorrectly, it will allow the tractor to turn sharper one direction than the other.

To take off the drag link, remove the nuts and lock washers holding the ball joint to the steering gear and left front axle bracket. See figure 17.

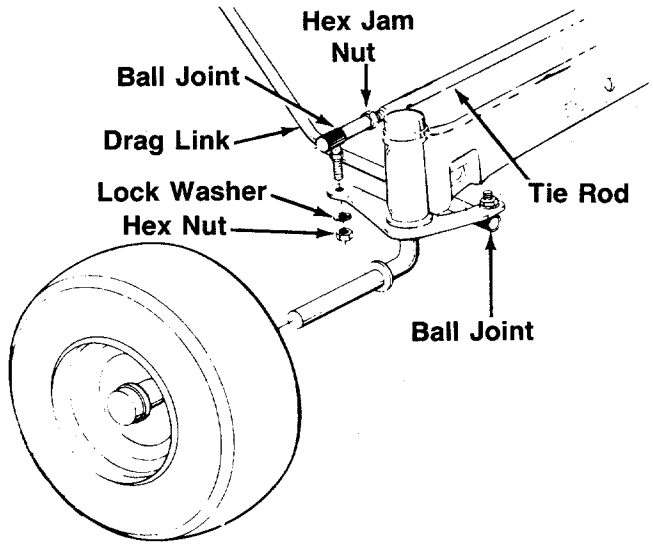


FIGURE 17.

ENGINE

Refer to separate engine manual for all engine maintenance procedures.

MAINTENANCE OF BATTERY

1. Check electrolyte level periodically (at least every two weeks). Keep the level to the split rings. Use only distilled water or a good quality drinking water. Never add acid or any other chemicals to the battery after initial activation.
2. The battery should be checked with a hydrometer after every 25 hours of operation. If the specific gravity is less than 1.225, the battery should be recharged. Maximum charge rate 5 AMPS.
3. Coat the terminals and exposed wire with a thin coat of grease or petroleum jelly for longer service and protection against corrosion.
4. The battery should be kept clean. Any deposits of acid should be neutralized with soda and water. Be careful not to get this solution in the cells.

5. Avoid tipping the battery. Even a "sealed" battery will leak electrolyte when tipped.

STORAGE OF THE BATTERY

1. Charge battery using normal methods. NEVER store discharged battery as it will not recover.
2. When storing battery for extended periods, disconnect battery cables. Removing battery from unit is recommended.
3. Store in cold, dry place.
4. Recharge battery whenever the specific gravity is less than 1.225, before returning to service, or every two months, whichever occurs first

COMMON CAUSES FOR BATTERY FAILURE

1. Overcharging
2. Undercharging
3. Lack of water
4. Loose hold downs and/or corroded connections
5. Excessive loads
6. Battery electrolyte substitutes
7. Freezing of electrolyte

NOTE

These failures do not constitute warranty.

BATTERY REMOVAL OR INSTALLATION

WARNING

When removing the battery, follow this order of disassembly to prevent your wrench from shorting against the frame.

1. Remove the Negative cable.
2. Remove the Positive cable.

To install a battery:

1. Attach the Positive cable.
2. Attach the Negative cable.

JUMP STARTING

1. Attach the first jumper cable from the Positive terminal of the good battery to the Positive terminal of the dead battery.
2. Attach the second jumper cable from the Negative terminal of the good battery to the FRAME OF THE UNIT WITH THE DEAD BATTERY.

WARNING

Failure to use this starting procedure could cause sparking, and the gases in either battery could explode.

INSTALLATION OF TIRE TO RIM

WARNING

The following procedure must be followed when removing or installing a tire to the rim.

1. Be sure rim is clean and rust free.
2. Lubricate both the tire and rim generously.
3. Never inflate to over 30 p.s.i. to seat beads. Excessive inflation pressure when seating beads may cause tire/rim assembly to burst with force sufficient to cause serious injury.

BELT REMOVAL AND REPLACEMENT

Changing the Front Drive Belt

1. If a cutting deck is attached to your tractor, remove it. Remove the battery.
2. Raise and block the front wheels of the tractor so you can work under it.
3. Unscrew the belt guard release next to the engine pulley. See figure 18.

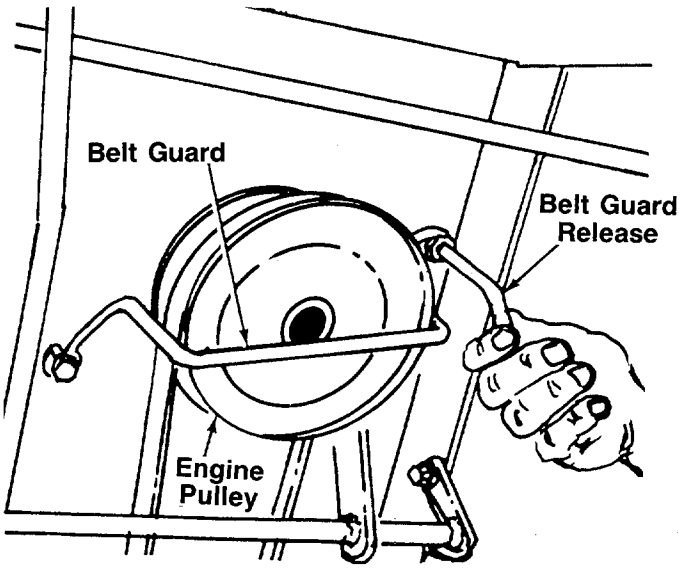


FIGURE 18.

4. Swing the belt guard forward towards the front of the tractor.

WARNING

Observe the way the belt is twisted. If the new belt is installed backwards, the tractor will run backwards.

5. Using a bar or large screwdriver, pry the pulley assembly towards the front of the tractor and unhook the belt from the pulley. See figure 19.

6. Install the new belt by hooking it over the engine pulley and twisting the belt to the left as you attach it to the pulley.
7. Test the operation of the tractor to make certain the belt has been installed correctly.

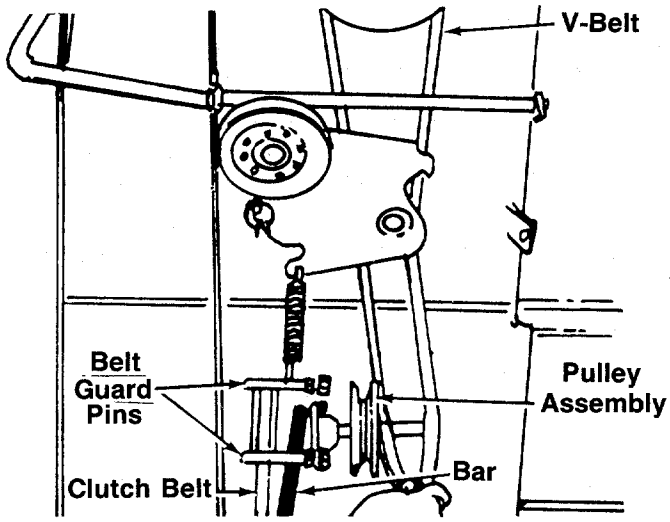


FIGURE 19.

Removing the Rear (Clutch) Belt

1. If a cutting deck is attached to your tractor, remove it. Remove the battery.
2. Raise and block the front wheels of the tractor so you can work under it.
3. Depress the clutch-brake pedal and set the parking brake.
4. Remove the two belt guard pins on the pulley assembly. See figure 19.
5. Take off the idler assembly by removing the center bolt.

NOTE

Be sure the belt clip is reassembled the same way. See figure 20.

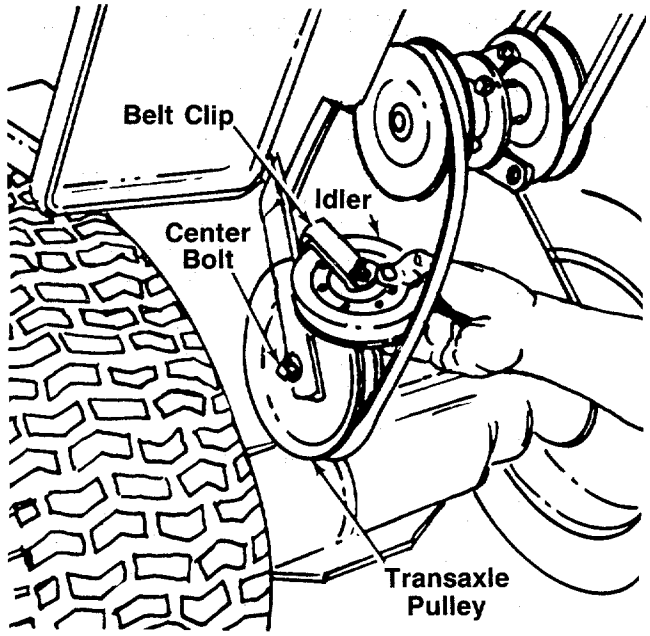


FIGURE 20.

6. Remove the center bolt and slide the transaxle pulley off. See figure 20.
7. Reassemble in reverse order with a new V-belt.

OFF-SEASON STORAGE

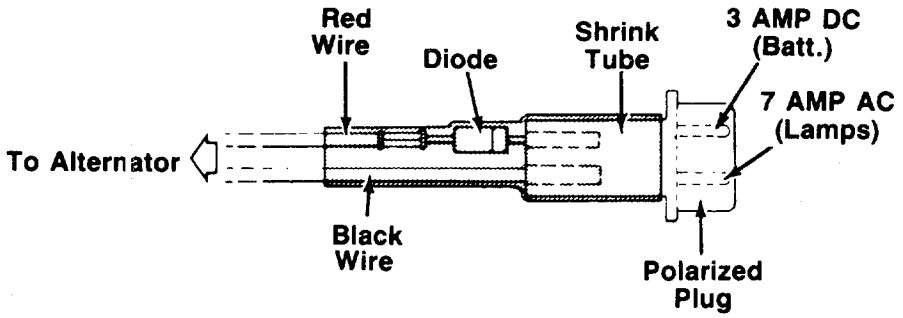
If the machine is to be inoperative for a period longer than 30 days, prepare for storage as follows.

1. Clean the engine and the entire unit thoroughly.
2. Lubricate all lubrication points. Wipe the entire machine with an oiled rag to protect the surfaces.
3. Refer to the engine manual for correct engine storage instructions. The engine must be completely drained of fuel to prevent gum deposits from forming on essential carburetor parts, fuel lines and fuel tanks.
4. Refer to battery storage instructions on page 16.
5. Store unit in a clean, dry area.

NOTE

When storing any type of power equipment in an unventilated or metal storage shed, care should be taken to rustproof the equipment. Using a light oil or silicone, coat the equipment, especially any chains, springs, bearings and cables.

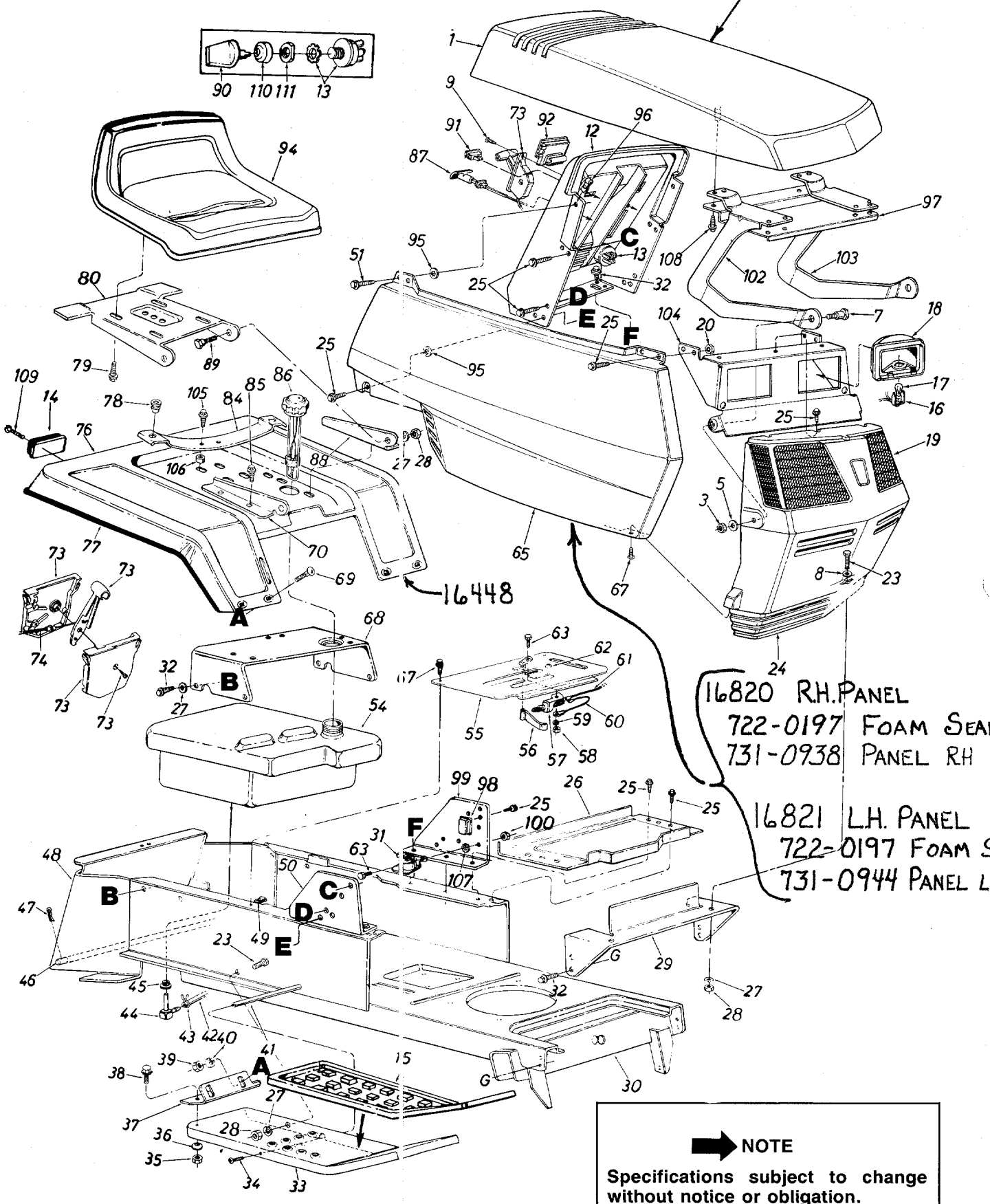
TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
Engine will not crank	Battery installed incorrectly	The battery must be installed with the negative terminal, identified at the terminal post by (Neg, N or −), grounded. The positive terminal (Pos, P or +) attaches to the large cable from the solenoid. The small red wire from the fuse holder or circuit breaker is also attached to the positive terminal.
	Blown fuse or circuit breaker	Replace fuse with 7½ amp. fuse ¼ x 1¼" lg. Circuit breaker will reset itself when it cools off. Fuses or circuit breakers seldom open or fail without a reason. The problem must be corrected. Check for loose connections in the fuse holder. Replace fuse holder if necessary. A dead short may be in the cranking or charging circuit where the insulation may have rubbed through and exposed the bare wire. Replace the wire or repair with electrician's tape if the wire strands have not been damaged. Note: Look for a wire pinched between body panels, burned by the exhaust pipe or muffler or rubbed against a moving part.
	Battery is dead or weak	Use a hydrometer to check the condition of the battery. The Specific Gravity (s.g.) should be 1.265 at 80°F. (1.215 s.g. minimum needed for cranking engine). The reason for the battery failing must be determined. (1) Defective battery. Battery will not accept or hold a full charge. (2) Short circuit. Check for grounded wire. (3) Charging system not working. The charging system is an alternator located under the flywheel. It is unregulated and rated 3 amp. at 3600 r.p.m. A diode (rectifier) is located in the output lead just before the wire harness plug on the engine side.  The diode changes A.C. to D.C. to charge the battery. A bad diode can either fail to charge the battery or discharge the battery if the alternator is shorted as well as the diode. To test: (1) Disconnect charger lead from the battery (small red wire). (2) Connect 12 V small test lamp between the 3 amp. D.C. charge lead and the positive terminal of the battery. (3) With the engine off, the lamp should not light. If it does, the diode and possibly the alternator should be replaced. (4) Start the engine. The lamp should light. If it does not, the alternator (stator) or lead wire is bad and should be replaced.
	Mechanical failure (Wires and switches)	The interlock system includes two mechanical activated switches which are wired in series in the circuit used to energize the starter solenoid. While testing the interlock system, you will make the mower temporarily unsafe by permitting the engine to be started with the blade and clutch engaged. WARNING: While testing, disengage the clutch, shut off the blade control, set the parking brake and place the gear shift lever in neutral. Attach a wire (minimum 18 gauge) to the positive terminal of the battery and touch the other end to the small terminal on the solenoid. **If the engine does not crank:** (1) There is a loose connection or poor ground. (2) The solenoid may be bad. The solenoid can be checked by using a heavy wire (#8 gauge minimum) and jumping between the two large terminals. If the engine cranks, the solenoid is bad. (3) If the engine does not crank when you jump the solenoid, have the starter motor tested by an authorized engine dealer. If the engine does crank, the problem is with one of the safety switches, ignition switch or the wire between the fuse holder (or circuit breaker) and the small terminal on the solenoid. Note: Look for a poor connection at the switches or a defective switch. Replace if necessary.
Engine cranks but will not start	Throttle or choke not in starting position	Check owner's guide for correct position for throttle control and choke for starting.
	No spark to spark plug	Spark plug lead disconnected. Connect lead. Hold spark plug lead away from engine block about 1/8". Crank engine. There should be a spark. If not, have engine repaired at authorized engine service dealer. Faulty spark plug. To test, remove spark plug. Attach spark plug lead to spark plug. Ground the spark plug body against the engine block. Crank the engine. The spark plug should fire at the electrode. Replace if it does not.

TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
	No fuel to the carburetor	Gasoline tank empty. Fill. Fuel line or in-line fuel filter plugged. Remove and clean fuel line. Replace filter if necessary.
	Air filter dirty	If the air cleaner is dirty, the engine may not start. Clean or replace as recommended by the engine manufacturer.
Engine smokes	Engine loses crankcase vacuum	Dipstick not seated or broken. Replace defective part. Engine breather defective. Replace.
Excessive vibration	Bent or damaged blade spindle	**Stop engine immediately.** Check all pulleys, blade adapters, keys and bolts for tightness and damage. Tighten or replace any damaged parts.
	Bent blade	**Stop engine immediately.** Replace damaged blade. Only use original equipment blades.
Mower will not discharge grass or leaves uncut strips	Engine speed low Transmission selection Blades short or dull	Throttle must be set between 3/4 and full throttle. Use lower transmission speed. The slower your ground speed, the better the quality of cut. Sharpen or replace blades (uncut strip problem only).

Model 814



NOTE

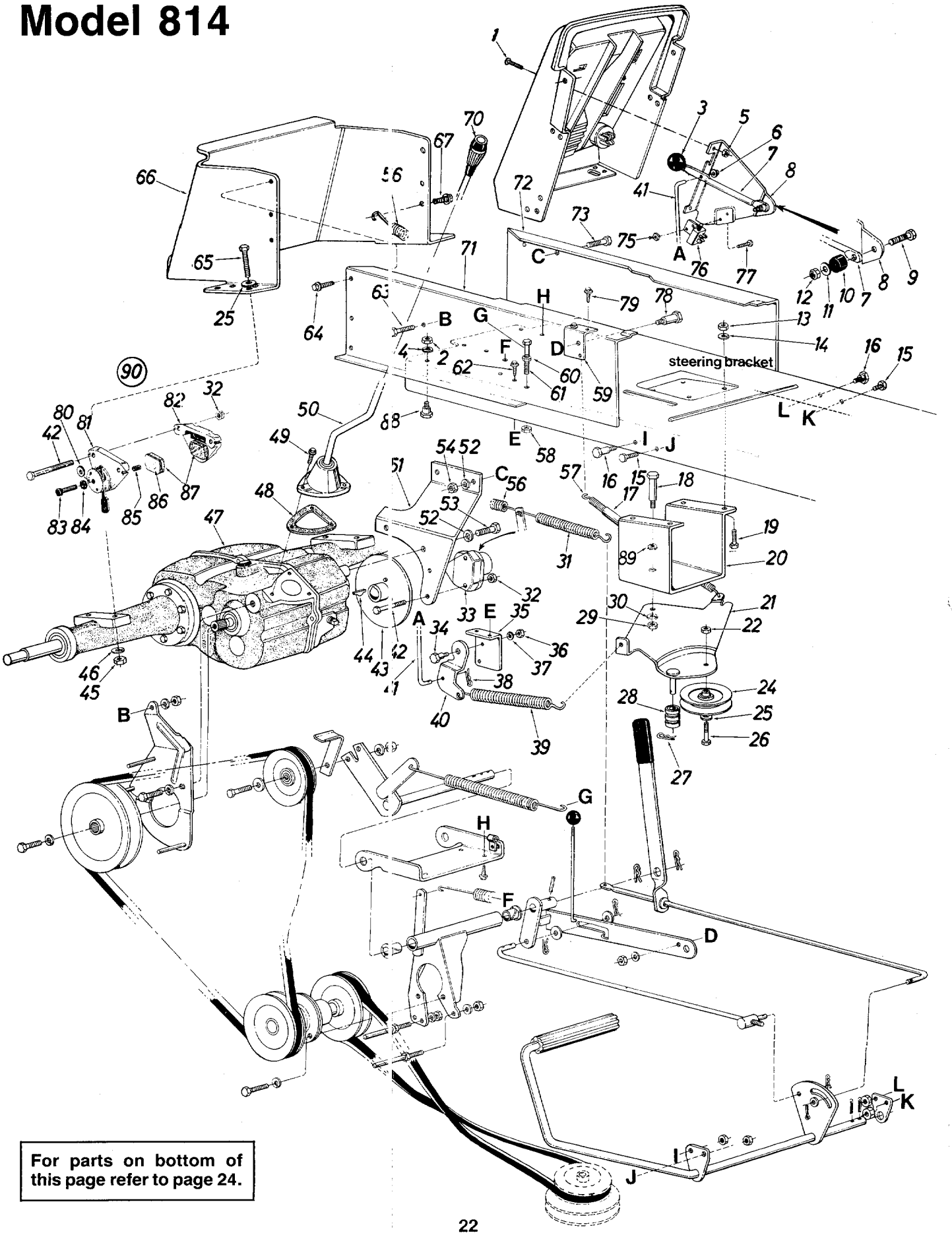
Specifications subject to change without notice or obligation.

Model 814

PARTS LIST FOR MODEL 814 GARDEN TRACTOR

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	16823	638	Hood Ass'y.	N
3	712-0158		Hex Cent. L-Nut 5/16-18 Thd.	
5	736-0278		Fl-Wash. 5/16" I.D. x 5/8" O.D.	
7	738-0141		Shld. Bolt .437" Dia. x .35"	
8	736-0159		Fl-Wash. .344" I.D.	
9	710-0779		Truss Mach. AB-Tap Scr. #10 x .50" Lg.	
10	722-0155		Foam Strip	
12	731-0957		Dash Ass'y.	N
13	725-0267		Ignition Switch	
14	725-1128		Taillight	
15	731-0755		Foot Pad	
16	725-1058		Socket	
17	725-0963		Lamp	
18	731-0705		Headlight Housing	
19	731-0948		Lens—R.H.	N
	731-0949		Lens—L.H.	N
20	712-0107		Hex L-Nut ¼-20 Thd.	
23	710-0118		Hex Bolt 5/16-18 x .75" Lg.*	
24	731-0935		Grille	N
25	710-0599		Hex Wash. Hd. Scr. ¼" x .50" Lg.	
26	13379		Battery Plate	
27	736-0119		L-Wash. 5/16" I.D.*	
28	712-0267		Hex Nut 5/16-18 Thd.*	
29	15825		Grille Mounting Bracket	
30	13820		Lower Frame Ass'y.	
31	725-0771		Solenoid	
32	710-0726		Hex Thd. Rolling Scr. 5/16-24 x .75" Lg.	
33	13828		Running Board—R.H.	
	13827		Running Board—L.H. (Not Shown)	
34	710-0323		Truss Mach. Scr. 5/16-18 x .75" Lg.*	
35	712-0267		Hex Nut 5/16-18 Thd.*	
36	736-0242		Bell-Wash. .34" I.D. x .87"	
37	15846		Fender Brkt.—R.H.	
	15847		Fender Brkt.—L.H. (Not Shown)	
38	710-0118		Hex Bolt 5/16-18 x .75" Lg.*	
39	712-0287		Hex Nut ¼-20 Thd.*	
40	736-0329		L-Wash. ¼" I.D.*	
41	738-0435		Running Board Rod	
42	751-0173		Fuel Line 40" Lg.	
43	726-0207		Hose Clamp 3/8"	
44	751-3054		90° Nipple	
45	735-0149		Bushing (Fuel Tank)	
46	738-0482		Hitch Rod	
47	714-0147		Internal Cotterpin	
48	13813	~~638~~	Hitch Plate	
49	726-0139		Speed Nut	
50	17293		Dash Support Brkt.—R.H.	N
51	710-0642		Hex Wash. Hd. Tap Scr. ¼ x .75" Lg.	
54	751-0367		Fuel Tank	
55	16736		Transmission Cover Ass'y.	N
56	732-0405		Switch Actuator Lever	
57	725-0268		Safety Switch	
58	712-0287		Hex Nut ¼-20 Thd.*	
59	736-0329		L-Wash. ¼" I.D.*	
60	725-0765		Electric Wire	
61	725-1134		Reverse Lockout Wire Harness	
62	731-0405		Snap Bushing	
63	710-0289		Hex Bolt ¼-20 x .50" Lg.*	
65	~~16920~~ 13820	~~638~~	Side Panel Ass'y.—R.H.	N
	16821	~~638~~	Side Panel Ass'y.—L.H.	N
67	710-0351		Truss Mach. "B" Tap Scr. #10 x .50" Lg.	
68	15849		Seat Mounting Channel	
69	710-0167		Carriage Bolt ¼-20 x .50"*	
70	15802		Seat Bracket—R.H.	
73	831-0823		Throttle Control Box Ass'y.	
74	746-0634		Throttle Control Wire	
76	~~15886~~	~~638~~	Rear Fender	
77	731-0511-81		Trim Strip—81" Lg.	
78	731-0555		Grommet	
79	710-0623		Hex Wash. Hd. AB-Tap Scr. 3/8 x .75" Lg.	
80	15607		Seat Pivot Bracket	
84	732-0431		Seat Spring	
85	710-0607		Hex Wash. Hd. Self-Tap Scr. 5/16-18 x .50" Lg.	
86	751-0370		Gas Cap w/Gauge	
87	746-3022		Choke Control Comp.	N
88	15803		Seat Bracket—L.H.	
89	738-0155		Shld. Bolt .437" Dia. x .162"	
90	725-1341		Ignition Key	N
91	725-0634		Light Switch	
92	725-0925		Ammeter	
94	757-0336		Seat Ass'y.—Black Trim	
	757-0337		Seat Ass'y.—Red Trim	
95	726-0270		Pushnut Fastener	
96	712-0185		Speed Nut ¼-20 Thd.	
97	16808		Hood Reinforcement	N
98	725-0459		Circuit Breaker	
99	17294		Dash Support Brkt.—L.H.	N
100	712-0271		Hex Sems Nut ¼-20 Thd.	
102	17270		Hood Hinge—R.H.	N
103	17271		Hood Hinge—L.H.	N
104	17223		Light Bracket	N
105	710-0817		Hex Tap Scr. 5/16-18 x 1.25" Lg.	
106	750-0706		Spacer .38" I.D.	
107	736-0222		Ext. L-Wash. .44" I.D.	
108	710-0896		Hex Wash. B-Tap Scr. ¼ x .62" Lg.	
109	710-0936		Truss Hd. AB-Tap Scr. #6 x .62" Lg.	
110	725-1347		Ignition Switch Cap	N
111	725-1346		Ignition Switch Nut	N

Model 814



For parts on bottom of this page refer to page 24.

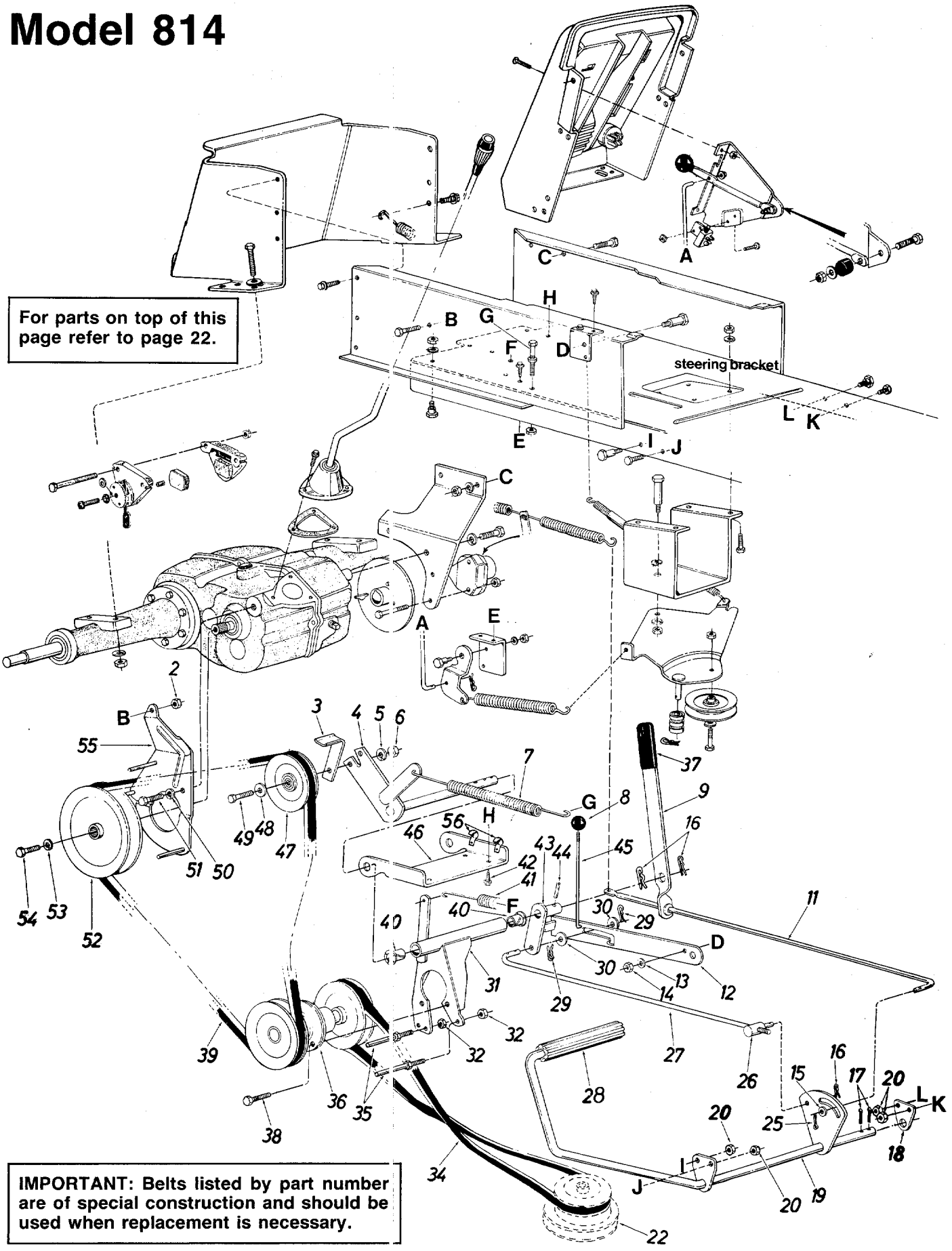
Model 814

PARTS LIST FOR MODEL 814 GARDEN TRACTOR

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	710-0286		Truss Mach. Scr. ¼-20 x .50" Lg.*	
2	712-0287		Hex Nut ¼-20 Thd.*	
3	720-0165		Knob—Blade Clutch	
4	736-0329		L-Wash. ¼ I.D.*	
5	712-0271		Hex Sems Nut ¼-20 Thd.*	
6	726-0106		Push Cap ¼" Rod	
7	747-0513		Blade Clutch Lever	
8	13950		Deck Clutch Control Brkt.	
9	710-0106		Hex Scr. ¼-20 x 1.25" Lg.*	
10	735-0126		Rubber Wash. .330 I.D. x .87	
11	736-0173		Fl-Wash. ¼" I.D. x .75" O.D. x .057	
12	712-0107		Hex Cent. L-Nut ¼-20 Thd.	
13	712-0267		Hex Nut 5/16-18 Thd.*	
14	736-0119		L-Wash. 5/16" I.D.*	
15	710-0201		Hex Bolt 3/8-16 x .62" Lg.*	
16	738-0143		Shld. Bolt ½" Dia. x .335 Lg. 3/8-16	
17	731-0483		Convoluted Conduit .50 I.D. x 4" Lg.	
18	738-0155		Shld. Bolt 7/16 Dia. x .16" 5/16-18	
19	710-0376		Hex Bolt 5/16-18 x 1.00" Lg.*	
20	13826		Idler Mtg. Brkt.—Deck	
21	13893		Idler Brkt. Ass'y.	
22	712-0181		Hex L-Nut 3/8-16 Thd.*	
24	756-0293		4"—"V" Idler Pulley	
25	736-0300		Fl-Wash. 3/8" I.D.	
26	710-0342		Hex Bolt 3/8-16 x 1.25" Lg.*	
27	714-0104		Hairpin Cotter 5/16" Rod	
28	748-0278		Spacer	
29	712-0267		Hex Nut 5/16-18 Thd.*	
30	736-0119		L-Wash. 5/16" Scr.*	
31	732-0260		Ext. Spring—Brake Rod	
32	712-0375		Hex Cent. L-Nut 3/8-16 Thd.	
33	761-0178		Disc Brake Caliper Ass'y.	
34	738-0155		Shld. Scr. 7/16" Dia. x .16" Lg. 5/16-18	
35	13833		Parking Brake Cam Mtg. Brkt.	
36	712-0267		Hex Nut 5/16-18 Thd.*	
37	736-0119		L-Wash. 5/16" I.D.*	
38	714-0104		Hairpin Cotter 5/16" Dia.	
39	732-0478		Ext. Spring—Deck Control	
40	13887		Deck Control Pivot Brkt.	
41	747-0708		Deck Control Rod	
42	710-0937		Hex Bolt 3/8-16 x 2.50" Lg.*	
43	761-0142		Hub & Disc Ass'y. (For Brake)	
44	714-0137		Hi-Pro Key 3/16 x 3/4" Lg.	
45	712-0798		Hex Nut 3/8-16 Thd.*	
46	736-0105		Bell-Wash. .40" I.D.	
47	—		Transaxle (See Breakdown)	
48	—		Part of Ref. No. 47	
49	—		Part of Ref. No. 47	
50	—		Part of Ref. No. 47	
51	13012		Transaxle Support	
52	736-0169		L-Wash. 3/8" Scr.*	
53	710-0216		Hex Scr. 3/8-16 x .75" Lg.*	
54	712-0375		Hex L-Nut 3/8-16 Thd.	
56	732-0157		Ext. Spring—Brake Return	
57	732-0308		Ext. Spring—Deck Idler Return	
58	712-0158		Hex L-Nut 5/16-18 Thd.	
59	13833		Parking Brake Cam Mtg. Brkt.	
60	712-0267		Hex Nut 5/16-18 Thd.*	
61	710-0442		Hex Bolt 5/16-18 x 1.5" Lg.*	
62	710-0599		Hex Thd. Rolling Scr. ¼-20 x .50" Lg.	
63	710-0216		Hex Bolt 3/8-16 x .75" Lg.*	
64	710-0726		Hex AB-Tap Scr. 5/16 x .75" Lg.	
65	710-0344		Hex Scr. 3/8-16 x 1.50" Lg.*	
66	13813		Hitch Plate	
67	710-0601		Hex Thd. Rolling Scr. 5/16-24 x .75" Lg.	
70	720-0218		Knob—Transaxle	
71	13848		Side Panel Upper Frame—R.H.	
72	16445		Side Panel Upper Frame—L.H.	
73	710-0216		Hex Bolt 3/8-16 x .75" Lg.*	
75	712-0121		Hex Nut #10-24 Thd.*	
76	725-0465		Safety Switch (Deck)	
77	710-0473		Truss Mach. Scr. #10-24 x .50" Lg.*	
78	738-0155		Shld. Bolt 7/16" Dia. x .16" Lg. 5/16-18	
79	710-0599		Hex Thd. Rolling Scr. ¼-20 x .50" Lg.	
80	HU-20-9764		Washer	
81	HUBOO3770066		Housing with Lever & Pin	
82	HU-16-13807		Anvil	
83	HU-39-13775		Pin, Adjuster	
84	HU-37-13818		Nut	
85	HU-39-13774		Pin, Actuator	
86	HU-25-13808		Backing Plate	
87	HU-24-13772		Lining	
88	738-0255		Shld. Bolt .375" Dia. x .180" Lg. ¼-20 Thd.	
89	736-0141		Wave Washer	
90	761-0178		Disc Brake Ass'y. Comp.	

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size shown on parts list.

Model 814



For parts on top of this page refer to page 22.

IMPORTANT: Belts listed by part number are of special construction and should be used when replacement is necessary.

Model 814

PARTS LIST FOR MODEL 814 GARDEN TRACTOR

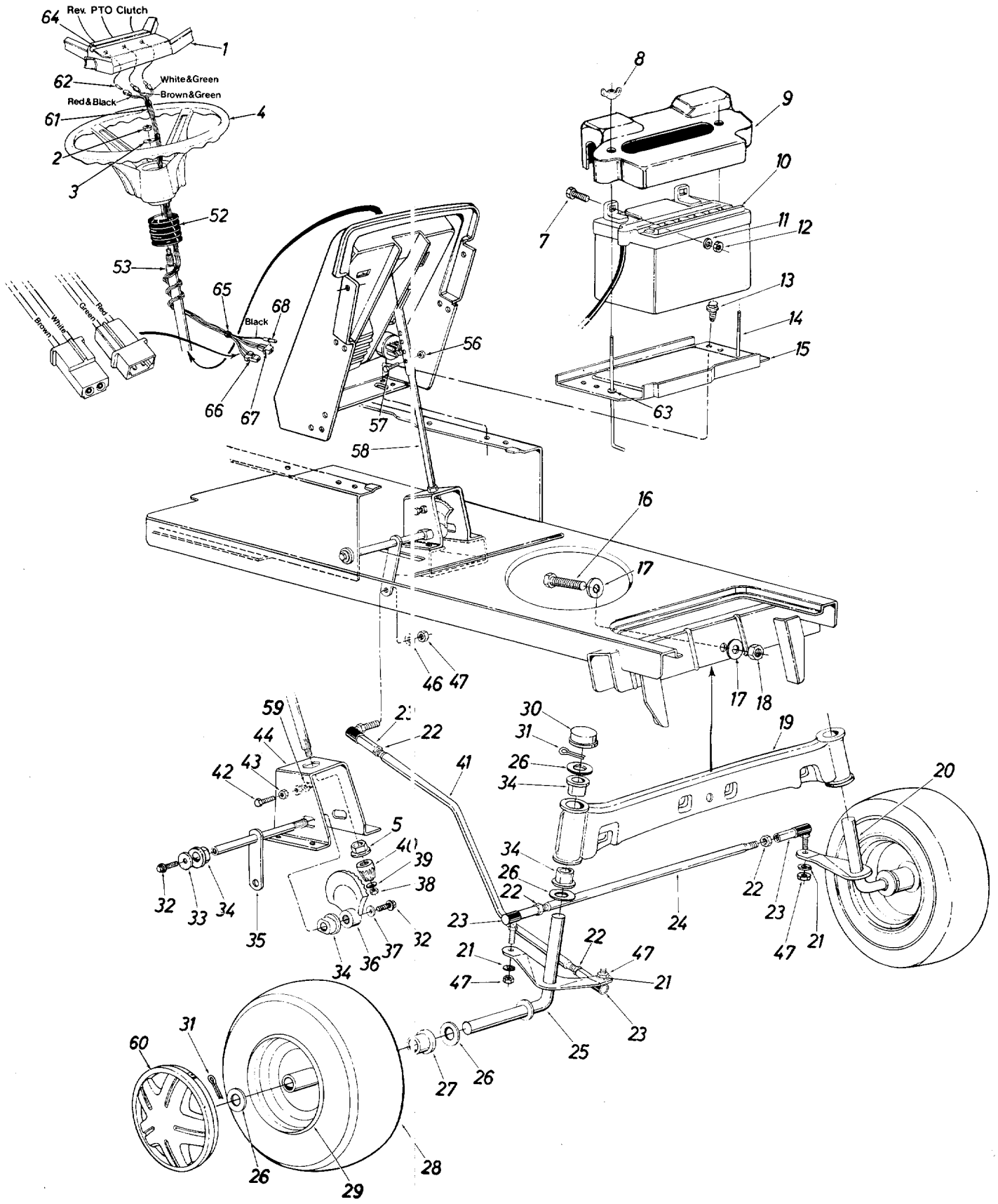
REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
2	712-0375		Hex L-Nut 3/8-16 Thd.		32	712-0181		Hex Top L-Nut 3/8-16 Thd.	
3	13819		Belt Guard (Clutch Idler)		34	754-0245		"V"-Belt	
4	13815		Clutch Brkt. Ass'y.		35	711-0696		Stud 3/8-16 x 3.62" Lg. Special	
5	736-0169		L-Wash. 3/8" I.D.*						
6	712-0798		Hex Nut 3/8-16 Thd.*		36	756-0324		Jack Shaft Ass'y.	
7	732-0384		Ext. Spring (Drive Idler)		37	720-0189		Flat Grip	
8	720-0166		Knob (Parking Brake)		38	710-0198		Hex Sem Scr. 5/16-18 x .75" Lg.*	
9	13872		Hand Brake Lever						
11	747-0304		Brake Rod		39	754-0244		"V"-Belt	
12	13832		Parking Brake Cam		40	741-0295		Nyliner 5/8" I.D. x .88" Lg.	
13	736-0119		L-Wash. 5/16" I.D.*		41	732-0153		Ext. Spring (Jack Shaft)	
14	712-0267		Hex Nut 5/16-18 Thd.*		42	710-0599		Hex Thd. Rolling Scr. ¼-20 x .50" Lg.	
15	736-0275		Fl-Wash. 5/16" I.D.						
16	714-0145		Hairpin Cotter 3/8" Rod		43	13871		Clutch-Idler Horn Ass'y.	
17	714-0115		Cotter Pin 1/8" Dia. x 1.00" Lg.*		44	715-0108		Spring Pin Spiral ¼" Dia. x 1.00" Lg.	
18	13859		Clutch Rod Brg. Brkt.		45	747-0300		Parking Brake Link	
19	13856		Clutch—Brake Pedal Ass'y.		46	13822		Idler Mtg. Brkt.—Drive	
20	712-0375		Hex Cent. L-Nut 3/8-16 Thd.*		47	756-0293		4" "V"-Idler Pulley	
22	756-0328		Engine Pulley 4.75 & 5.56		48	736-0300		Fl-Wash. 3/8" I.D.	
25	714-0507		Cotter Pin 3/32" Dia. x .75" Lg.*		49	710-0347		Hex Bolt 3/8-16 x 1.75" Lg.*	
					50	736-0169		L-Wash. 3/8" I.D.*	
26	711-0198		Pivot Bushing		51	710-0216		Hex Bolt 3/8-16 x .75" Lg.*	
27	747-0306		Brake Cam Rod		52	756-0332		"V"-Pulley 7.0" O.D. (Transaxle)	
28	735-0196		Foot Pad						
29	714-0145		Hairpin Cotter 3/8" Rod		53	736-0169		L-Wash. 3/8" I.D.*	
30	736-0101		Fl-Wash. 3/8" I.D. x 1.00" O.D. x .030		54	710-0180		Hex Scr. 3/8-24 x .75" Lg.*	
					55	13829		Belt Guard Ass'y.	
31	13823		Jack Shaft Mtg. Brkt. Ass'y.		56	726-0193		Plastic Hose Clamp	

OPTIONAL EQUIPMENT

At the time of manufacture of garden tractor, the following optional equipment is available.

Description	Model No.	Description	Model No.
Grass Collector	190-083-000	Sleeve Hitch	190-929-000
40" Snow Thrower	190-930-000	28" Tiller Attachment	190-746-000
48" Dozer Blade	190-940-000	40" 8 HP Tiller Attachment	190-766-000
Gang Reel (Set of three)	190-466-000	10" Plow	190-978-000
38" Lawn Sweeper	190-483-000	Single Disc Harrow	190-980-000
Lawn Roller	190-660-000	Row Cultivator	190-984-000
Dump Cart	190-653-000	Front Counterweight	190-925-000
Spike Aerator	190-655-000	50 Lb. Wheel Weights (pair)	190-784-000
Core Aerator	190-901-000	Ag Tires—23 x 10.5 (pair)	190-859-000
Electric Lift Kit	190-749-000	Tire Chains—23 x 9.5	190-964-000

Model 814

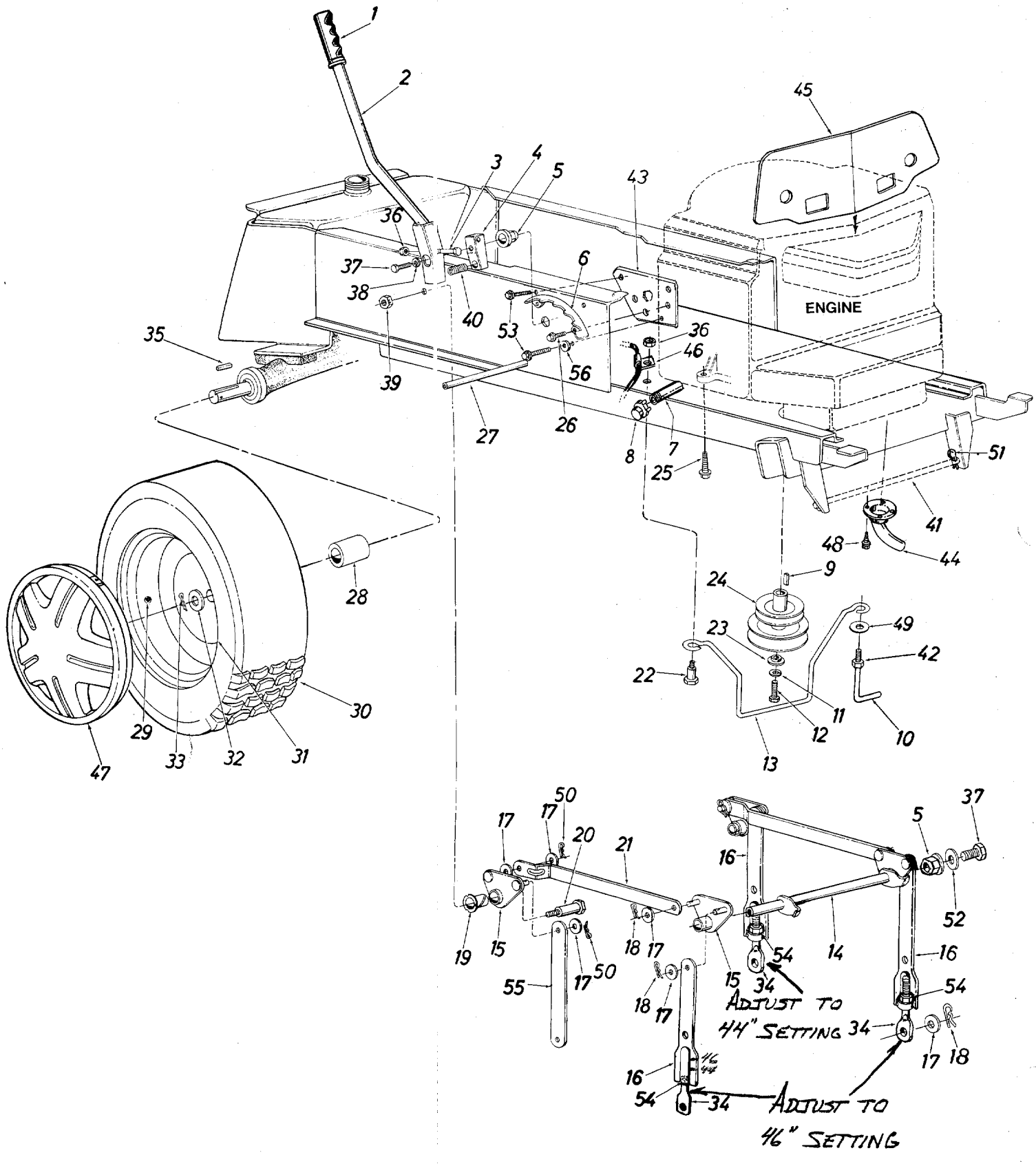

Rev. PTO Clutch
White&Green
Brown&Green
Red&Black
Red
Green
White
Brown
Black

Model 814

PARTS LIST FOR MODEL 814 GARDEN TRACTOR

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	731-0955		Steering Wheel Insert	N	33	736-0133		Fl-Wash. 3/8" I.D. x 1.25" O.D. x .090"	
2	712-0237		Hex Cent. L-Nut 5/16-24 Thd.						
3	736-0242		Bell-Wash. 5/16" I.D. x .87" O.D. x .060"		34	741-0199		Flange Double "D" Brg. .753" I.D.	
4	731-0806		Steering Wheel		35	12749		Steering Arm Shaft Ass'y.	
5	741-0225		Plastic Hex Bearing 5/8" I.D.		36	748-0236		Side Gear—Steering	
7	710-0258		Hex Bolt ¼-20 x .62" Lg.		37	736-0105		Bell-Wash. 3/8" I.D.	
8	712-0113		Wing Nut Plastic ¼-20 Thd.		38	712-0237		Hex Cent. L-Nut 5/16-24 Thd.	
9	731-0707		Battery Cover		39	736-0264		Fl-Wash. 5/16" I.D. x .62" O.D. x .059"	
10	725-0453		12-V Battery						
11	736-0329		L-Wash. ¼" I.D.*		40	748-0237		Pinion Gear—Steering	
12	712-0287		Hex Nut ¼-20 Thd.*		41	747-0302		Drag Link	
13	710-0599		Hex Thd. Rolling Scr. ¼-20 x .50" Lg.		42	710-0342		Hex Cap Scr. 3/8-16 x 1.25" Lg.	
14	711-0222		Battery Hold Down Rod		43	712-0798		Hex Nut 3/8-16 Thd.*	
15	13379		Battery Plate		44	12850		Steering Gear Sup. Ass'y.	
16	710-0533		Hex Bolt 5/8-18 x 2.5" Lg.*		46	736-0169		L-Wash. 3/8" I.D.*	
17	736-0282		Flat Wash. .66" I.D. x 2.25" O.D. x .17		47	712-0241		Hex Nut 3/8-24 Thd.*	
					52	731-0954		Steering Bellow	
18	712-0923		Hex Cent. L-Nut 5/8-18 Thd.		53	16512		Upper Steering Shaft	
19	13865		Front Pivot Bar Ass'y.		56	712-0324		Hex L-Nut ¼-20 Thd.	
20	13839		Front Axle Ass'y.—L.H.		57	710-0958		Hex Bolt ¼-20 x 1.25" Lg. (Special)	
21	736-0169		L-Wash. 3/8" I.D.*						
22	712-0711		Hex Jam Nut 3/8-24 Thd.		58	738-0588		Lower Steering Shaft	
23	723-0156		Ball Joint Ass'y.		59	731-0998		Nylon Cap	
24	747-0301		Tie Rod		60	734-1503		Hub Cap	N
25	13838		Front Axle Ass'y.—R.H.			734-0542		Hub Cap (Chrome)	
26	736-0316		Fl-Wash. .780" I.D. x 1.59" O.D.		61	725-1364		Wire Harness (Incl. Ref. 62)	N
					62	725-1365		Bulb	N
27	741-0382		Flange Bearing		63	726-~~0270~~ 0271		Pushnut Fastener	N
28	734-1500		Front Wheel Ass'y. Comp.		64	777-7993		Steering Wheel Insert Label	N
29	734-1501		Front Wheel Rim Only		65	729-0204		Clamp	N
30	731-0484		Dust Cover		66	729-0166		Connector	N
31	714-0121		Cotter Pin 5/32" Dia. x 1.00" Lg.*		67	729-0139		Connector	N
					68	729-0132		Connector	N
32	710-0180		Hex Bolt 3/8-24 x .75" Lg. Grade 5						

Model 814



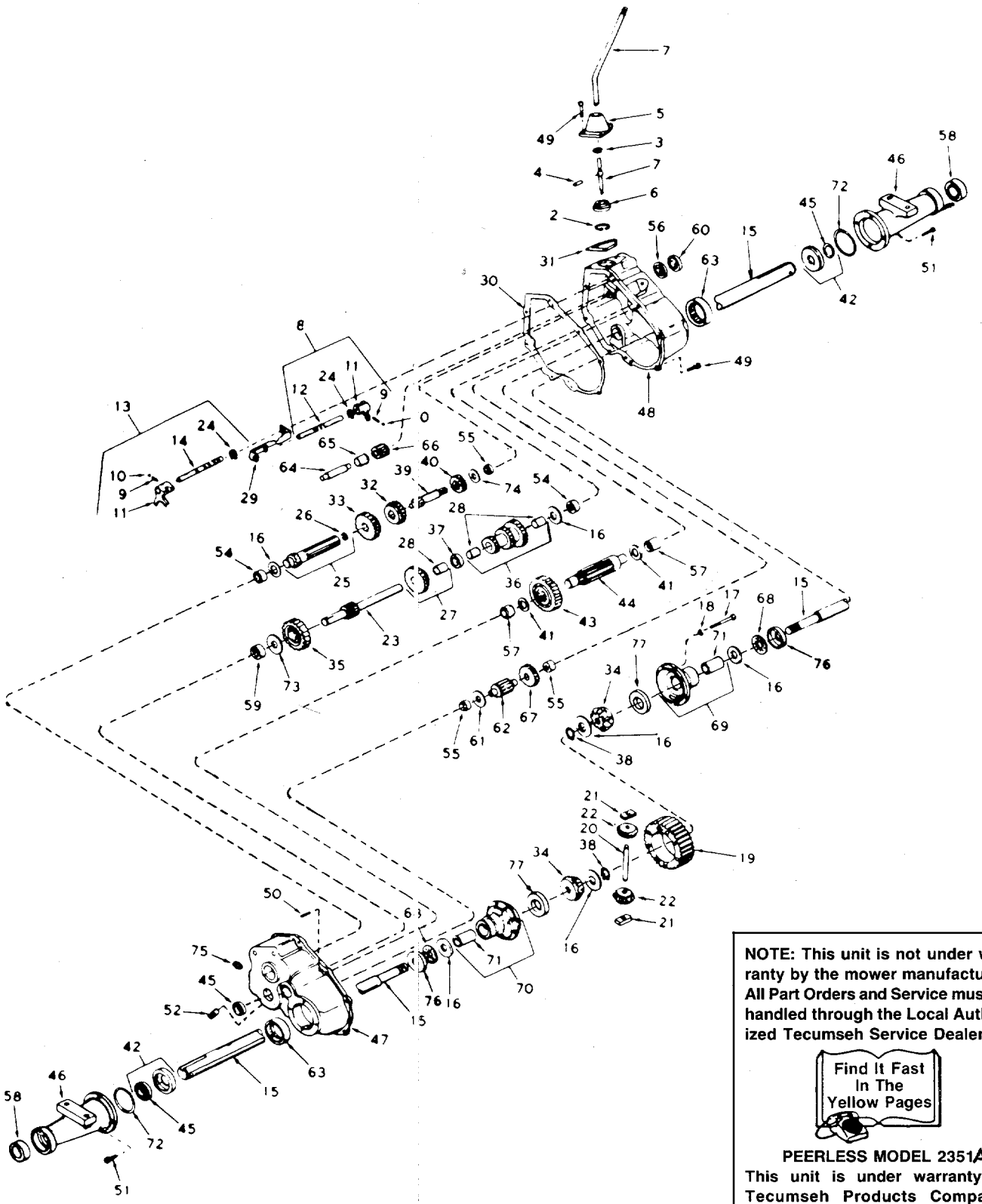
Model 814

PARTS LIST FOR MODEL 814 GARDEN TRACTOR

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	720-0157		Grip	
2	17282		Lift Handle Ass'y.	N
3	710-0442		Hex Bolt 5/16-18 x 1.5" Lg.*	
4	748-0274		Lift Shaft Drive	
5	741-0225		Plastic Hex Brg. 5/8" I.D.	
6	14231		Index Brkt. Deck Lift	
7	737-0164		Pipe Nipple 3/8-18 Npt.	
8	737-0143		Pipe Cap 3/8-18 Npt.	
9	714-0118		Sq. Key 1/4" x 1/4" x 1.50" Lg.	
10	747-0216		Belt Guard Lock Pin	
11	736-0171		L-Wash. 7/16" I.D.	
12	710-0757		Hex Scr. 7/16-20 x 1.50" Lg.	
13	747-0299		Belt Guard	
14	13889		Lift Shaft Ass'y.	
15	13895		Lift Pivot Brkt. Ass'y.	
16	17303		Adj. Deck Lift Link	N
17	736-0192		Fl-Wash. 1/2" I.D. x 1.00" O.D. x .090"	
18	714-0101		Hairpin Cotter	
19	741-0295		Nyliner 5/8" I.D. x .88" Lg.	
20	738-0445		Shld. Bolt 5/8" Dia. x .96" Lg. 3/8-16	
21	13790		Connecting Link	
22	738-0296		Shld. Bolt .437" Dia. x .268" Lg. 5/16-18	
23	736-0322		Flat Wash. .44" I.D. x 1.25" O.D. x .17"	
24	756-0328		Two-Step Engine Pulley 4.75" & 5.56"	
25	710-0502		Hex Wash. Hd. Scr. 3/8-16 x 1.25" Lg.	
26	710-0726		Hex Thd. Rolling Scr. 5/16-18 x .75" Lg.	
27	738-0435		Running Board Rod	
28	750-0490		Spacer 1.0" I.D. x 1.25" O.D. x 2.12" Lg.	
29	734-0255		Air Valve	
30	734-1005		Rear Wheel Ass'y. Comp.	
	734-0322		Tire Only	
31	734-1015		Rear Wheel Rim Only	
32	736-0345		Flat Washer	
33	714-0142		Cotter Pin 3/16" Dia. x 1.50" Lg.	
34	711-0817		Eye Bolt Adj. Link ½-13 Thd.	
35	714-0120		Sq. Key 1/4 x 3.0"	
36	712-0158		Hex Cent. L-Nut 5/16-18 Thd.	
37	710-0237		Hex Scr. 5/16-24 x .62" Lg.*	
38	736-0119		L-Wash. 5/16" I.D.*	
39	712-0181		Hex Top L-Nut 3/8-16 Thd.	
40	732-0369		Compression Spring	
41	738-0392		Deck Connecting Rod	
42	712-0123		Hex Nut 5/16-24 Thd.*	
43	14170		Index Brkt. Reinforcement Plate	
44	751-0460		Exhaust Pipe 1¼" DIA.	
45	17319		Heat Shield	N
46	726-0175		Mounting Clamp	
47	734-1503		Hub Cap	N
	734-1025		Hub Cap (Chrome)	
48	710-0224		Hex Wash. Hd. AB-Tap Scr. #10 x .50" Lg.	
49	736-0242		Bell-Wash. .39" I.D.	
50	714-0111		Cotter Pin .09 Dia. x 1.0" Lg.	
51	714-0149		Int. Cotter Pin	
52	736-0231		Flat Wash. .34" I.D. x 1.12" O.D. x .125"	
53	710-0600		Hex Wash. Hd. AB-Tap Scr. 5/16-24 x .5" Lg.	
54	712-0206		Hex Nut ½-13 Thd.	
55	14399		Deck Link	
56	736-0264		Fl-Wash. .344" I.D.	

The engine is not under warranty by the mower manufacturer. If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines—Gasoline."

Model 814



NOTE: This unit is not under warranty by the mower manufacturer. All Part Orders and Service must be handled through the Local Authorized Tecumseh Service Dealer.

Find It Fast In The Yellow Pages

PEERLESS MODEL 2351A

This unit is under warranty by Tecumseh Products Company. Parts and Service are available through all Tecumseh, Lauson Power Products Service Dealers. Check the "Yellow Pages" of your telephone directory under "Engines—Gasoline."

TRANSAXLE MODEL 2351 (717-0450)

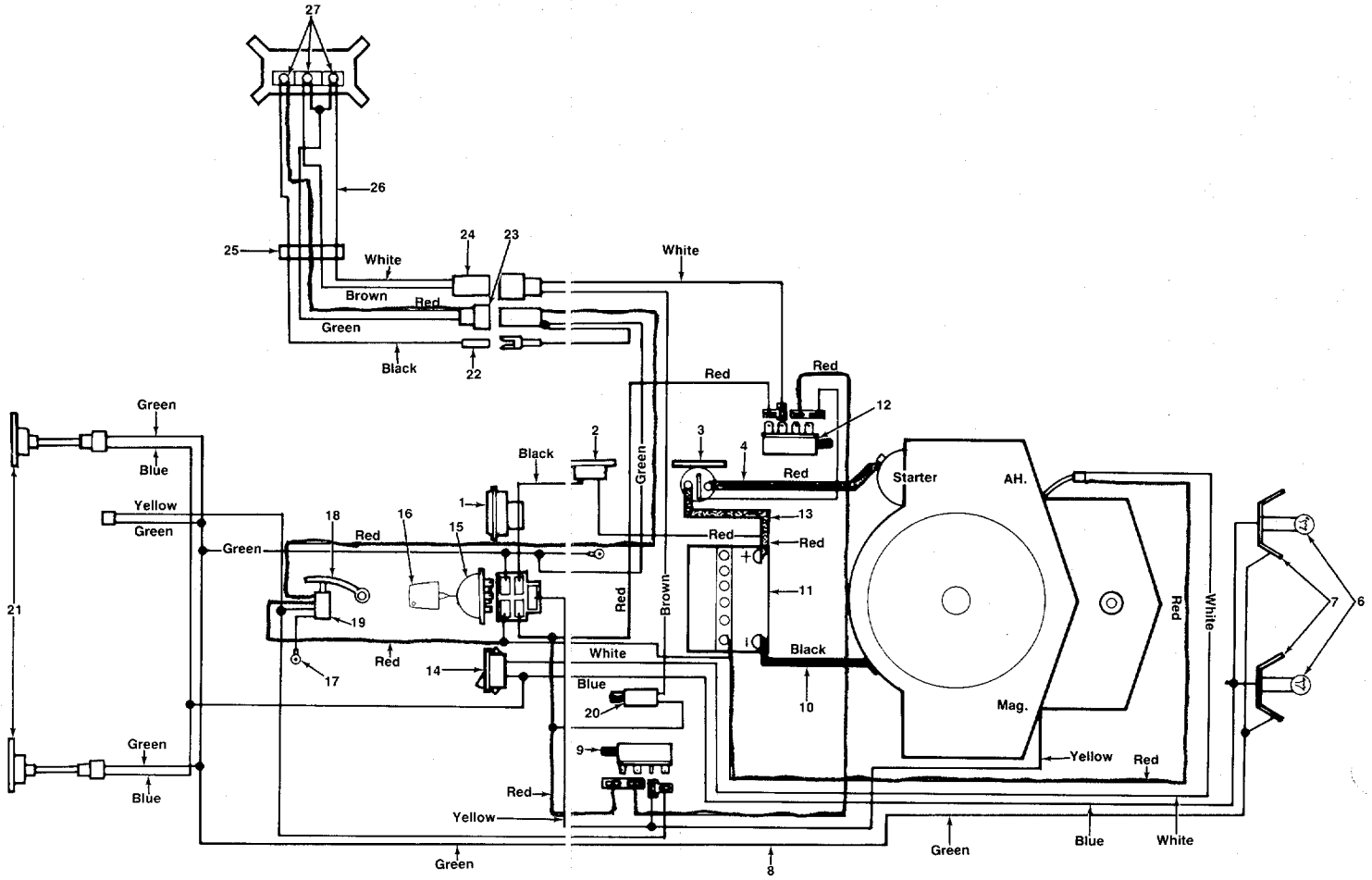
Model 814

PARTS LIST FOR TRANSAXLE PEERLESS MODEL 2351A(717-0450)

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
2	PE-792016		Ring, Snap	
3	PE-792001		Ring, Quad	
4	PE-792049		Pin, Roll	
5	PE-784093		Housing, Shift Lever	
6	PE-784094		Keeper, Shift Lever	
7	PE-784308		Lever, Shift	
8	PE-784054		Rod Ass'y., Shift (Incl. Nos. 9 thru 12 and 24)	
9	PE-792003		Spring, SHIFT FORK	
10	PE-792004		Ball, Steel	
11	PE-784004		Fork, Shifter	
12	PE-784055		Rod, Shifter (3rd and 4th)	
13	PE-784056		Rod Ass'y., Shift (Incl. Nos. 9, 10, 11, 14 and 24)	
14	PE-784057		Rod, Shifter (Low)	
15	PE-774433		Axle (18-11/32" Long)	
16	PE-780042		Washer, Thrust	
17	PE-792005		Scr., Hex Hd., ¼-20 x 2½	
18	PE-792006		Lock Washer, 1/4" SPLIT	
19	PE-778033A		Gear, Ring	
20	PE-786019		Pin, Drive	
21	PE-786027		Block, Drive	
22	PE-77809~~X~~7		Pinion, Bevel	
23	PE-776029A		Shaft and Gear, Brake	
24	PE-792017		Ring, Snap	
25	PE-776189A		Shaft and Bearing Ass'y., Pinion (Incl. No. 26)	
26	PE-780018		Bearing, Needle	
27	PE-778034		Gear Cluster Ass'y. (Incl. No. 28)	
28	PE-780053		Bushing	
29	PE-784074		Stop, Shifter	
30	PE-788023		Gasket, Case and Cover	
31	PE-788022		Gasket, Shifter Lever Housing	
32	PE-778019A		Gear, Shifting (3rd and 4th)	
33	PE-778020 8231		Gear, Shifting (1st, 2nd and Rev.)	
34	PE-77~~8095~~		Gear, Bevel	
35	PE-778037		Gear, Idler	
36	PE-778035A		Gear Cluster Ass'y. (Incl. No. 28)	
37	PE-786024		Spacer	
38	PE-792018		Ring, Snap	
39	PE-776175		Shaft, Input	
40	PE-778024A		Spur Gear, Input Shaft	
41	PE-780052		Washer, Thrust	
42	PE-788021		Seal and Retainer Ass'y., Oil (Incl. No. 45)	
43	PE-778036		Gear, Output	
44	PE-776028		Pinion, Output	
45	PE-788008		Seal, Oil	
46	PE-782025		Housing, Axle	
47	PE-772016A		Cover Ass'y., Transaxle (Incl. Nos. 54, 55, 57, 59 and 63)	
48	PE-770012		Case Ass'y., Transaxle (Incl. Nos. 54, 55, 57 and 63) FLANGE	
49	PE-792007		Screw, ~~Socket~~ Hd., 1/4-20 x 3/4	
50	PE-786026		Pin, Dowel	
51	PE-792037		Screw, Hex Hd. Sems, 5/16-18 x 1	
52	PE-792019		Plug, Magnetic Drain	
54	PE-780049		Bearing, Needle	
55	PE-530105		Bearing, Needle	
56	PE-780024		Bearing, Ball	
57	PE-780047		Bearing, Needle	
58	PE-780050		Bearing, Ball	
59	PE-780046		Bearing, Needle	
60	PE-788025		Seal, Oil	
61	PE-780001		Washer	
62	PE-776031		Shaft and Pinion	
63	PE-780048		Bearing, Needle	
64	PE-776030		Shaft, Reverse Idler	
65	PE-786025		Spacer, Reverse Idler	
66	PE-778016		Idler, Reverse	
67	PE-778038		Spur Gear (22 Teeth)	
68	PE-780039		Bearing, Thrust	
69	PE-774072A		Carrier Ass'y., Differential (Incl. No. 71)	
70	PE-774071A		Carrier Ass'y, Differential (Incl. No. 71)	
71	PE-780041		Bushing	
72	PE-788024		"O" ~~Ring~~ SQ. SEAL	
73	PE-780007		Washer, Thrust	
74	PE-780051		Washer, Thrust	
75	PE-792010		Plug, Pipe	
76	PE-780075		Race, Thrust	
77	PE-780107		Washer	

Shift lever is not shipped with transaxle. Order separately.

Model 814



PARTS LIST FOR ELECTRIC SYSTEM

REF NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	725-0925	Ammeter	15	725-0267	Ignition Switch
2	725-0459	Circuit Breaker	16	725-1341	Ignition Key
3	725-0771	Solenoid	17	725-0765	Ground Wire
4	725-0561	Wire	18	732-0405	Spring Lever
6	725-0963	Bulb	19	725-1197	Safety Switch
7	725-1058	Socket	20	725-0277	Safety Switch
8	725-1363	Wire Harness	21	725-1128	Taillight
9	725-0465	Safety Switch	22	729-0139	Connector
10	725-0995	6 Ga. Black Wire	23	729-0166	Connector
11	725-0453	Battery 12V	24	729-0132	Connector
12	725-0842	Safety Switch	25	729-0204	Clamp
13	725-0563	Wire	26	725-1364	Wire Harness
14	725-0634	Light Switch	27	725-1365	Bulb

PARTS INFORMATION

POWER EQUIPMENT PARTS AND SERVICE

Parts and service are available through the authorized service firms listed below. All orders should specify the model number of your unit, part numbers, description of parts and the quantity of each part required.

BRIGGS AND STRATTON, TECUMSEH AND PEERLESS PARTS AND SERVICE

Briggs & Stratton, Tecumseh and Peerless parts and service should be handled by your nearest authorized engine service firm. Check the yellow pages of your telephone directory under the listing **Engines—Gasoline,** Briggs & Stratton or Tecumseh Lauson.

NOTE: If any parts are found to be missing or defective upon assembly of this unit, write to advise the factory so that immediate replacement can be made.

ALABAMA	**BIRMINGHAM**	
Auto Electric & Carburetor Co.	2625 4th Ave. S.	35233
ARKANSAS	**NORTH LITTLE ROCK**	
Sutton's Lawn Mower Shop	5301 Roundtop Drive Box 368, Rt. 4	72117
CALIFORNIA	**PORTERVILLE**	
Billious	75 North D Street	93257
COLORADO	**DENVER**	
Spitzer Industrial Products Co.	6601 N. Washington St.	80229
FLORIDA	**JACKSONVILLE**	
Radco Distributors	4909 Victor St. Box 5459	32207
	HIALEAH	
Small Eng. Dist.	7995 W. 26th Court	33016
GEORGIA	**EAST POINT**	
East Point Cycle & Key Inc.	2834 Church St.	30344
ILLINOIS	**LYONS**	
Keen Edge Co.	8615 Ogden Ave.	60534
INDIANA	**ELKHART**	
Parts & Sales Inc.	2101 Industrial Pkwy.	46516
IOWA	**DUBUQUE**	
Power Lawn & Garden Equip.	2551 J.F. Kennedy	52001
LOUISIANA	**NEW ORLEANS**	
Suhren Engine Co.	8330 Earhart Blvd.	70118
MARYLAND	**TAKOMA PARK**	
Center Supply Co.	6867 New Hampshire Ave.	20912
MASSACHUSETTS	**SPRINGFIELD**	
Morton B. Collins Co.	300 Birnie Ave.	01107
MICHIGAN	**MOUNT CLEMENS**	
Power Equipment Dist.	340 Hubbard	48043
MINNESOTA	**PLYMOUTH**	
Hance Distributing Inc.	12795 16th Ave. North	55441
MISSOURI	**EARTH CITY**	
Oscar Wilson Engine & Parts	4159 Shoreline Dr.	63045
	KANSAS CITY	
Automotive Equip. Service	3117 Holmes St.	64109
NEW JERSEY	**ALLOWAY**	
Piersons	Canal St., Box 494	08001
NEW MEXICO	**ALBUQUERQUE**	
Spitzer Eng. & Parts Co.	1023 Third Ave. N.W.	87103
NEW YORK	**CARTHAGE**	
Gamble Dist., Inc.	West End Ave.	13619
NORTH CAROLINA	**GREENSBORO**	
Dixie Sales Company	335 N. Green	27402
OHIO	**CARROLL**	
Stebe's Mid-State Mower Supply	Box 366, 71 High St.	43112
	CLEVELAND	
Bleckrie, Inc.	7900 Lorain Ave.	44102
	WADSWORTH	
National Central	687 Seville Rd.	44281
	YOUNGSTOWN	
Burton Supply Co.	1301 Logan Ave. Box 929	44501
PENNSYLVANIA	**HARRISBURG**	
EECO Inc.	4021 N. 6th St.	17110
	WILLOW GROVE	
Thompson Rubber Co.	850 Davisville Rd.	19090
	PITTSBURGH	
Bluemont Co.	11101 Frankstown Rd.	15235
	PUNXSUTAWNEY	
Frank Roberts & Sons	R.D. 2	15767
	SCRANTON	
Scranton Auto Ignition Co.	1133-35 Wyoming Ave.	18509
TENNESSEE	**KNOXVILLE**	
Ace Distributors	2103 Magnolia	37917
	MEMPHIS	
American Sales & Service, Inc.	3035-43 Bellbrook	38116
TEXAS	**DALLAS**	
Marr Brothers, Inc.	423 E. Jefferson	75203
	SAN ANTONIO	
Engine House Inc.	8610 Botts Lane P.O. Box 17867	78217
UTAH	**SALT LAKE CITY**	
Powered Products	1661 N. Beck St.	84116
VIRGINIA	**ASHLAND**	
RBI Corp.	101 Cedar Ridge Dr.	23005
WASHINGTON	**SEATTLE**	
Equip. Northwest	1410 14th Ave.	98122
WISCONSIN	**MILWAUKEE**	
Wisconsin Magneto Inc.	4727 N. Teutonia St.	53209

WARRANTY PARTS AND SERVICE POLICY (0687)

The purpose of warranty is to protect the customer from defects in workmanship and materials, defects which are NOT detected at the time of manufacture. It does not provide for the unlimited and unrestricted replacement of parts. Use and maintenance are the responsibility of the customer. The manufacturer cannot assume responsibility for conditions over which it has no control. Simply put, if it's the manufacturer's fault, it's the manufacturer's responsibility; if it's the customer's fault, it's the customer's responsibility.

CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES:

1. **Replacement of Missing Parts** on new equipment.
2. **Replacement of Defective Parts** within the warranty period.
3. **Repair of Defects** within the warranty period.

All claims MUST be substantiated with the following information:

1. **Model Number, Serial Number and/or Data Code** of unit involved.
2. **Date** unit was purchased or first put into service.
3. **Date of Failure.**
4. **Nature of Failure.**

REPLACEMENT PARTS • P.O. BOX 36900 • CLEVELAND, OHIO 44136